8th March 1818

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John Clarke

Charles Stanley

Legal to Lady Dr. Hugel

Notes on the Lectures of John Syng Dorsey, Professor of Materia Medica in the University of Pennsylvania. By John Y Black 1816, 1817

Nov. 7th 1816

In commencing my lectures on the Materia Medica, Gentlemen; I need not inform you, that this chair has been heretofore ~~been~~ filled by men of the most distinguishable talents. In teaching of the branch to which I have been called, I shall make every exertion to be usefull to you; tho' I am well aware that all the teachers can do, is to judiciously conduct you to a knowledge of the Elements. The materia medica has for its object everything that preserves and supports life, of these it is highly necessary that the student should be informd. I propose to pursue the plan of my able predecessor, discriminating between what is usefull and what is not, rejecting the latter and giving you the former, in order that you may become good practitioners. We shall commence our Lectures with the subject of Animal life. Dr. Jackson defines life to be the union of soul and body, this definition seems very obscure, but we must not forget the difficulty often attending definitions. I shall define life to be a power resisting putrefaction and chemical action, of preserving temperaments, Gold, silver, & all the metals are not easily changed but still they have no life. Among many the phenomena of life

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as exhibited in motion - heat - sensation & thought have been said to constitute life. This doctrine has had many advocates, Dr Rush taught it and before him Dr. Brown, This we consider completely confuted, by the fact, that life may exist without its phenomina.
Fish when frozen for some time are not dead, yet all the phenomina of life are absent. Vitality is as perfect in plants as in animals, and in the oyster &c as in man.
In many of the diseases of human beings, life or the phenomina, are absent for several days as in a trance, asphixia &c, and Mr Hunter thought that if a man were frozen he might be kept alive a century. By Drs Brown, Rus and others life has been said to be a forced state (here a quotation from Rush on animal Life) but none of them are the authors of it, for Dr Cullin taught as early as 1766 in the university of Edinburg.
Stimulus can never create life. They say a capacity for life exists, but this capacity for it is life most of the actions of life are the effects of stimulants. Can any vital action take place, without the agency of stimulants? The actions of life are forced,

but the powers of life are not forced, they might as well say that the air makes flame when we burn carbon &c. Next we may enquire whether organization influences life, among the lower orders the organization is very simple. In the Hydatid & polypus we have examples. The Hydatid is extremely simple in its organization, it probably consists of nothing but a stomach and absorbents & digestion constitutes its only function. The doctrine that the blood possesses life has been defended by Mr J Hunter among his ingenious experiments we have one drawn from the analogy of water in its solid or fluid state. a West Indian, says Mr H could never conceive of such a thing as ice. When we consider that food is the great source of nutrition & that every part, bone, muscle &c are formed of it, it seems not irrational to conclude that ~~that~~ it has vitality. Life we know cannot arise out of nor depend on mere organization. This of itself is nothing. wherever there is the power of preservation, the power of life may exist, Mr Hunter mentions this exists in many substances upon which he experienced. His experiments on eggs you may be familiar

with, an egg must have the power of self preservation & therefore life, as is proved by its resisting putrefaction & preserving its temperature, you will examine the experiments of Mr Hunter on eggs. He found that a fresh egg in a freezing mixture remained fluid 29° a dead egg was frozen at 32° He also found that a fresh egg does not freeze so soon by 7½ minutes as an egg which has been laid for some time and the egg froze quicker the second than the first time near by 7½ minutes. The same experiments were made on frogs, eels, snails & all these things seem conclusive of the truth of what we have said, that life may exist independant of its phenomina. The blood when exposed to similar experiments, showed the same results; this proves that life is not dependant upon organization.

We confess our ideas are imperfect concerning what life is but we know what it is not. Life then consists in certain powers; in a simple state, only a power to preserve life itself, & it has higher powers which become obvious as we rise in the scale of beings.

This considered is important in order to attend to the modus operandi of medicines for it is

and always has been an aphorism, Medicamenta non agunt in cadevera. There are two terms frequently made use of, & the definitions of which you will hear from another chair, These are Irritability and sensibility, on the subject of Sympathy I shall give you a few observations

This we define to be action from remote impressions and it has had several names as consent of parts &c. &c.

So extensive is the influence of this over the animal economy that a knowledge of it is quite as important as of the circulation of the blood: It has been divided into partial & ~~imperial~~ universal, an instance of universal sympathy is afforded in those few which result from local diseases, Partial sympathy is ~~discovered~~ divided into Remote, Contiguous and continuous

Remote is when a part is affected which is not actually stimulated. Contiguous sympathy is that in which parts sympathise with each other that are in actual contact. Continuous is when the whole arterial sympathise with an inflamation in a part. We have also sympathy from sensation as sighing in melancholia &c but these are perhaps only partial. Mr Hunter died of mental mortification on receiving a rude speech from one of his rivals. Hectic fever one of the phenomina connected with this principal, has been attribu-

ted

ted to the absorption of pus. But that it is not produced by this we have several striking proofs as in cases of Scrophula where hectic appears before suppuration takes place, and in cases of suppurating bubaes &c. much pus is abstracted without hectic being induced. Why is not hectic induced by the suppurating stump after amputation of a scrophulous knee joint. Thus we see Hectic is not to be explained by suppuration.

Formerly all kinds of medicines were thought to act upon the system, by being taken into the circulation. Sympathy explains their operation much more satisfactorily. We may here notice the sympathy between the Schneiderian membrane and the lachrimal sack and glands. When this membrane is irritated, these secrete and discharge a deluge of tears which washes the nostril. Light irritating and causing the contraction of the pupil another instance. The nose, throat & fauces sympathise with the diaphragm, hence sneezing &c.

The bladder, urethra and glans penis sympathise reciprocally. A calculus in one kidney, produces pain in the other. Inflamation of one eye is often communicated to the other, and after removing a piece of iron filing from the surface of the eye, an operation, which I frequently perform

with my penknife I'll find almost uniformly that on the ensuing day inflamation ceases in the other eye. The stomach has a more extention of associated actions than any other organ in the system. Hence we find apoplexy, nightmare &c from its undue distention and in cases of Dyspepsia we find a great variety of symptoms. Yellow Fevers as Dr. Warren has observed has its throne and seat in the stomach accordingly we find a great diversity of symptoms accompanying it Dr. Physic had a patient in one of the Epidemics in this city who complained of nothing but a pain in her foot; she died, and upon examining her stomach it was found in a high state of inflamation and engorged with black vomit.

We find the same diversified sensation of pain in Psoas alfepes &c. The connection of the stomach and the skin has been long observed, and often excites our surprize. The effects of cold water as reciprocally shown; are the consequences of error in diet are well known to many of you. We have instances of people who cannot eat certain substances without suffering from eruptive diseases. Some cannot eat fish without exposing themselves to an unpleasant eruptive disease.

I do not assert that Sympathy offers a complete explanation of the Modus operandi of Medicines, but that it assists us much cannot be denied. And do we better explain the

modes operandi of mercury when we say it is taken into the circulation & there stimulates the heart and arteries? Another thing which we should keep in view is that peculiarity in individuals families termed Idiosyncracy, as it is a thing we frequently meet with in practice. Some cannot receive the odour of certain substances without ~~without~~ the greatest inconveniences, whilst the odour produces little or no comparative effect upon the organ of smell in the generality of men. Dr Brown who was fellow pupil with me when with Dr Physic, could never smell Ipecac: without having a paroxysm of asthma Dr Barton had a pupil of whom he relates the same idiosyncracy we have instances ~~are~~ where even the smell of fish, has had peculiar effects. These idiosyncracies are often hereditary and perhaps by them gout becomes a hereditary disease. Another thing though purely pathological is not unworthy our attention. I mean the incompatibility of two actions (different) with each other, at the same time. The fact that no two actions can exist in the same part at the same time, as first ably defended by Mr Hunter, is proved in a variety of instances. The principal is illustrated in small pox,

Vaccination - measles &c. It is true, observations subsequent to those of Mr Hunter & Mr Hunter, prove that two diseases can exist in the same person at the same time as in the case of Mr Hopkinson's child - but they are only accidental exceptions to a general rule. The consideration of this is important, because it frequently happens that to change the action is the first & most important indication in the cure of the disease. Mr Latta has taken a view of the subject which you may attend to. I believe the same of what he says, amounts to this, that as the effect of the action is the same, the action itself must be the same. If says Mr Adams, in a few cases, art can effect the developement of two diseases simultaneously, are we to conclude from those that it is a law of nature? again and again have they inserted vaccine matter and never could both be developed without any apparent influence of the other: all this we may conclude or consider as proving the incompatibility of two actions existing at the same time in the same part of the system.

Monday Nov. 19th 3rd Lecture

In our preceding lecture we have said something on the subject of animal life & have explained it as

as approved by most of the professors in this university
Now we go on to heat of materia medica.
This branch not only comprehends active Medicines
but also alimentary articles whatever may
be their nature, and the fluids which we use
as drinks. In former times much was said of the
diet by Physicians, but now it seems to be con-
signed to the management of friends & nurses.
In many diseases proper aliment is all that is
necessary to effect a cure. One thing I must
suggest to you, and you will consider it
of importance to remember, that the diseases of
the United States require a more rigid diet,
than those of any other country. Again do we
anything & everything without attention to
this important part of the treatment of dis-
eases by a rigid attention to diet, you will
therefore see the necessity of attending to diet
in the neighbourhood where you live & you
may rest assured that the Dietical part of
your practical duties will form an im-
portant object to claim your attention.
You will always be asked Dr, shall I eat
apples, pears, peaches, oysters &c. You must
be able to answer them readily. We shall
now heat of the Nutrientia & under the

Nutrientia we mean to include all articles employed as food, drink or condiments. The ultimate composition of medicines not necessary to be known. We aim at facts and results & leave the more minute distinctions & accurate analysis to Nat. History & Chemistry.

Aliments may be divided into animal & vegetable these into milk and acid. Sugar is very nutritious many odorous substances also are very nutritious, as onions & Garlic &c. One vegetable that is nutritious to one animal may prove poisonous to another as the hemlock which poisons men, is eaten by the horse. Goats eat Stramonium without inconvenience while it poisons so many other animals. There are certain poisonous substance (vegetables) which by exposure to heat, become perfectly innocent. most of the vegitables used in diet as condiments have considerable odours. A question has long agitated physiologist whether man was intended for animal or vegitable food. We are surprised at the different modes of living among different people, and are astonished when we contrast the wonderful supper of Lucullus which cost 800 with the plain & simple meal of Cornaro. In some parts whole nations substitute or nothing but vegitables

as in Scotland where they eat bark but a pare of the alliacea. Rice is the sole food of many people who inhabit the earth. Man can change his diet with less inconvenience than some other animals. Not so easy to the brute creation. Boerhaave gives the case of a man who tried with how little life could be supported. Dr. Stork made some experiments to ascertain the Dr. Dwyer of South Carolina was taken in endeavouring to rescue the Marquis Lafayette, he was imprisoned and fed on bread & water only & had excellent health

Whole nations live on animal food as in the north of Europe. The Scythians live exclusively on animal food. The Tartars also, and we are told the Patagonians prefer the flesh of the horse, to every other kind of aliment.

So far as comparative anatomy would throw light on the subject, we should conclude from the structure of teeth & that man was intended for both animal & vegitable food.

It has been said that the intestines of carnivorous Animals, are not so long as those of graminivorous, longer than those of the human species, and from it some ridiculous conclusions concerning chylification have been deduced.

But from all we are able to discover we must agree that both animal and vegitable food are best and that to kill and eat was one of the privileges granted by providence The inconvenience attending a diet of either exclusively is also a proof, however we must here allow for the influence of habit. A diet wholly animal produces eruptions on the skin, Scurvy &c. while a diet entirely vegitable induces debility. But we are struck with admiration at the manner in which nature adapts food to climate, and we may say with confidence that of the two a vegetable diet is much the best Sir George Staunton says ~~with confidence~~ in China the inhabitants have none of those violent diseases which are found in European countrys where much flesh is used and that they never suffer from inflamations &c The same observation is applicable to Calcutta. We do not say that this is entirely the result of vegitable food, but that it is in a great degree to be attributed to it.

Of Vegitable Food. The parts of vegitables used in aliments are the roots

seeds roots &c We ascertain the quantity of of vegitable nutriment in any article by the quantity of starch, sugar and oil that it contains. The chyle after it is elaborated contains much sugar. It is singular that Dr Cullen should have doubted of sugar being nutritious: how far he was right in referring so much to an acid I shall not enquire. That the human stomach can digest any thing - but that oil and sugar are more nutritious than any acid I am led to believe Dr. or B Stark lived 14 Days on olive oil & flour and increased in weight four or five pounds. Oil tho very nutritious is not very easy of digestion. Olive oil is much used in the south of Europe where they use bread and oil as we do bread and butter. Mucilage and gum are very nutritious. The former is only a solution of the latter in water. Gum Arabic is the most pure of these, and as an article of Diet in bowel complaints, it is invaluable, it is nutritious & not acid in Cholera Morbus, an excellent Medicine mixed with loaf sugar, Lime Water in mucilage of this Gum is very good in general cases of this disease. With respect to the common remedy, lime water & milk you will often find your patients vomit,

but never when mixed with mucilage of Gum Arabic, This is an excellent substitute for the former. There was a Caravan in the Deserts of Arabia which existd for weeks on this alone. This being premised, we shall next speak of the more important of the nutrients as they are scattered over our extensive country by the liberal hand of Nature.

Cerealia - Botanists class under this, every thing that makes bread. Dr. Cullen says this class is useful from the quantity of sugar it contains and the quantity of oil also but here he was very wrong. They certainly do contain the elements of sugar & oil, but not in a separate state. Minute chemical distinctions are never of much use in estimating the operation of medicines. In the Farinacea we include Wheat, Rye, Barley, corn, Indian Rice, Tapioca, arrow root &c. They all contain much nutriment, but differ much in quality

Wheat. The Natural History of this you are all acquainted with & you all know that it constitutes a large share of the food of the Inhabitant of Europe & America, I shall say nothing of the process of grinding, but shall make observations upon bread.

The seeds of wheat are compos of mucilage, Starch & Gluten. The latter is insoluble in water, ardent spirit, oil or ether. Bread is com pos of flour, water & yeast mixt up together while fermentation is going on mixt is baked, this immediately stops fermentation by raising the temperature & evaporating the moisture requisite for carrying it on. Dr Pk has proved in a very ingenious Thesis in 1790 that this is correct, & done himself honour and science a benefit. The yeast which is put in to the bread contains fixed air, heat being applied the air becomes elastic the water disappears &c. Later chemists say that 1 lb of flour will make a pound & a quarter of bread. The farinaceous diffa much in medical properties according as they are prepard. Unleavened bread is very ancient as we find in the bible and we find in some cases that unleavened bread is both nutritious and easy of digestion. Bread is very useful as carrying the saliva to the stomach. The very nutritious quality of bread is proved by Dr Franklin who lived 12 days on 10 lb bread. Stark lived on bread & water: when he eat 3 8 bar-ces bread and ℔ ij water he got fat. The great-est quantity he was able to eat was 3 46

Some cannot digest unleavened bread when in health & yet in complaints of the bowels, Crackers are an excellent article of diet, Stale bread is much more easy of digestion than that which has been newly baked. This you must all remember and never let your dyspeptic patients have fresh bread. Dr Rothergill has said something upon the subject and many disputes about the comparative digestibility of the crust and inner part

In all ~~cases~~ chronic diseases, bread must be well baked, there is nothing perhaps more difficult of digestion than dough. A Gentleman of my acquaintance one of the trustees of the institution eat some dough or half baked bread and was seized with asphyxia. Half baked and even fresh bread have produced it. A most valuable beverage for the sick is made by an infusion of toast in water; it becomes very useful after blows on the head and in all those cases where a rigid diet is indispensable. nothing can be of more importance than an attention to this. A man said he lived low when he drank a pint of wine a day, but still your gentlemen a low diet is toast & water some have lived forty days on this alone

Lecture 4th Novr 12th

At our Last lecture we commenced with saying something on the subject of Nutrientia & said that the subject had of late years been much overlooked. One of the class wished to know after lecture which branch or part of my lecture I considered most important. I cannot say which, but only tell you, that the present subject is quite worthy your attention. However unimportant the fermentation of bread may appear to you, at first it is far from being so. We mention the man who thought that he was living low, when he took a pint of wine pr day & indeed this might have been low living to him, if his usual quantity of drink & aliment was much greater. There are some men who live almost wholly on vegetable diet, to such when attacked with fever, we should give only bread & water. I proceed to say with the subject of bread. It has been observed that where people live on vegetable diet little inflamation takes place. The People of Asia lives on unfermented rice and in Europe & America still a large portion of the Inhabitants subsist on unfermented bread & have good health. Hippocrates observed that unfermented bread was not so light & easy of digestion as when it is well fermented

I dont intend to quote him often as authority but in this I thought him worthy of mention. But Sailors after long feeding on unfermented bread feel weak when they change to fermented ~~bread~~ &c. Pastry or that crust made by kneading up flour with fat or Butter is very indigestable & indeed makes up one of the most indigestable foods of all others. Pies and Tarts should be forbid to the flatulent, Dyspeptic &c The under crust of the pye is the most difficult of digestion. I have known a crust of this remain a week in the stomach & very little changed. Boiled Dye & dumplings is very difficult of digestion. In the philosophical transactions a case of Death, is recorded from eating apple dumplings. Another error is that pastry is always brought after dinner and hence when the stomach is almost exhausted with previous digestion, a fresh burthen is imposed upon it.

Rye — resembles wheat in its properties, but containing more sugar & more spirit, hence its sweet taste, and you know the quantity of spirit made from it in every part of our County. Wherever we find it distilled it becomes our duty as our Guardians of the public health to raise the voice of opposition against a practice so pernicious to our country.

The cheapness of this stimulus makes it easily obtained by the lower class of people & inevitable mischief ensues. Rye is also more aperient than wheat. It is also more opening to the alimentary canal & often nothing but this is requisite to cure costiveness. These changes of diet are often much more important than medicines. In opposite states of the system they are not to be used. Some diseases require an open and some a costive state of the bowels. In Prolapsus ani rye mush is the best diet I know off. Dr. Physick has seldom failed with this and far as I know off is the author of the practice. Rye flour is one of the best material for cataplasms.

Barley contains more saccharine matter or else it is more easily evolved than any other of the Cerealia. Dr. Cullen says that it is less nutritious than any others. It will make bread but not so good. The graduation of different nutriments is nearly as follows— Water— Toast Water— Barley Water or gum arabac & water with sugar. Now all these are very safe in common cases, but not in violent ones.

I have known fever kept up in pleurisy by giving too much drink. Barley water contains a good deal of nourishment.

Pearl Barley is by no means so good as the common and the process of preparation by no means helps it, but on the contrary is more liable to be subject to chemical changes from which the husk protects it

Rice, This differs from all the others in containing a less quantity of ascescent matter. It is very nutritious & supports the people of the most populous empires. In Dysenteria, Diarhoea, & Dyspepsia. It is the best diet we can employ when well boile. It has been supposed to possess astringent properties but for this there is little foundation. Dr. Percival exposed all the Cerealia to the process of fermentation & found that all went into the acetous fermentation before rice. It was slow and more like animal matter. There are few Dyspeptic Patient but what can digest rice if well boild. When well boils the grains are separate, a small quantity of water should be used & this makes an excellent and wholesome food. Whatever irritates the bowels in Dyspepsia & Diarhoea occasions purging. I know of nothing better here than a Decoction of rice, it makes one the most pleasant & proper food for the sick. Boiling rice flour to a Jelly & sweetening it with loaf sugar is a most Aliment for the sick —

a little rose water may improve it; Children are very fond of it. Rice is good in soup, Rice milk constitutes one of the best things of food in Bowel complaints & I have cured them by a diet of rice milk alone. In the occasional Diarrhoea off the Summer. a Table spoonfull of rice boiled in Milk & taken every hour will often expedite the cure

Avena Sativa, Oats, only used in this country as food for cattle, but in Scotland the Inhabitants use it much for bread & a pap made of oat meal is an aperient diet & mostly has the effect of opening the Bowels.

Buckwheat, one of the luxuries of our Country & Buckwheat cakes & plenty of Butter, are very good, but not for the Dyspeptic. The stomach of such will not be on them nor shortcakes nor muffins.

Indian Corn. Zea, Maize, of Botanist, native of America is very nutritious. It is sufficiently saccharine to be malted, but not good for Bread unless it be mixed with other flour. Corn when eaten whole is very indigestable as is proved by its passing away unchanged through the whole alimentary canal, Dr. Barton said this was the most nutritious and most valuable off all the Cerealia.

Mush is a healthy and digestible mode of cooking it and it is so much softened by boiling it that it becomes the best way that it can be used. The Best made Mattrasses that we have are made of the inner husk of the corn, if we except those made of curled hair. In Italy they are much used. Sir H Davy has tried to analyze all the cerealia. Wheat has 900 parts out of a 1000 of fecula — Barley & rye — peas & beans 574 — Potatoes 200

Sago is the pith of the cycas circinalis, it is often spoken off as a demulcent but it is only simple gluten. When well boiled in water it form an eligible aliment for the debilitated. When you prescribe Sago, dont give wine with it, as you will make it too stimulating. Without wine it is safe and wholesome. I recommend to your perusal Dr. Percivals book on this subject.

Tapioca, This grows in South America, it is obtained from the root by maceration. It also grows in . By much boiling it is dissolved into a very good aliment, but it must be boiled at least 2 hours, when rightly cooked it is easy of digestion.

Arrow root. This is the product of the Maranta Arundinacea, grows in the west indies & particularly in Jamaica. It also grows in Georgia

Dr. Barton received a letter from there which
stated its growth &c It affords more mucilage than
any Mingelia with which we are acquainted.
A common mode of preparing was with milk &
it curdles. But make a paste of it in water
first cold and then hot water, and after all add
your milk if you use any at all. But in
Bowel complaints give no milk with it. In
convalescence particularly this is a valuable
article. I have now finished the cealia.

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Lecture 5th Novr 14th

At our Last Lecture we finish what we had to say on the cerealia and now we go on to speak of other vegetable aliments without regard to their botanical affinity as this throws no light on their nutritious or medical properties. The Summer fruits next claim our attention they differ much from the cerealia and are composed mostly of an acid & saccharine matter. The Orange is a perfect example of them. Dr Cullen says they are good for the purpose of allaying Thirst, which they do partly by their cooling property & partly by their stimulating the mucus excretions of the mouth, and Fauces, & Stomach, & by correcting putrescency They excite the secretions, & keep open the bowels, but they are not nutritious in a great degree. In cases of Dyspepsia & Gout, they are to be avoided. I have seen cholic & spasm of the stomach & bowels take place from their use. This effect is to be explained by the quantity of acid ~~in the~~ stomach; besides what is in the fruit itself. The stomach generates much acid besides. The pulp of these fruits are very crude — Spallanzani observations on these are worthy your attention.

Even Water Melon is very indigestable in some instances, and I have seen it vomited up, & on days after it was put into the Stomach, very little changed & no signs of putrescency were about it. Flatulency, vomiting, purging, colic &c follow the use of these unripe fruits. The Juice of the orange is easy of digestion, but this observation is applicable to the water melon, pine apple &c among my Patients I find that the pulp always occasions inconvenience to the convalescent. Dr. Cullen gives a pretty good account of all these & I shall refer you to him. There are many among them that should be roast & many that should be boil'd. Stew'd with rich Syrups they constitute the sweet meats of the confectioners, and when in this state they are best when eaten with milk. Peaches, Quinces, Raspberries, make the best. In this way the crab apple is a very pleasant fruit, which when dried is very improper to be eaten.
One of the best ways of using these fruits as a Diet for the sick, is the common wardo apple, it prevents hunger, & keeps open the bowels. I often prescribe it where much nutriment would be improper. Water Melons, & cucumbers, sometimes produce the most dreadfull colics &

yet are much eaten in this City in the summer. An absurd and fatal prejudice, has prevail among people, that it was necessary to swallow the stones of cherries & other fruits in order to assist digestion, it arose from the mechanical ideas of digestion which considered these as necessary to assist it in the human species, as pebbles in the stomach of the Gallinacea. The danger of this we must be convinced of, from a recollection of the many dreadfull symptoms induced by it, as witnessed in colics, flatulencies, & Deaths. Dissection in these cases has shown a large ball of stones so solidly agglutinated as to stop up the alimentary canal. The Edinburgh Vol of Transactions contain an account of Death from cherries or plum stones, & Dr. Physick gives a case which fell under his notice of Death from persimmons. When such things has been swallowed we should give first an Emetic and then Castor Oil untill the alimentary canal is completely emptied. Dr. Cullen gave the preference to the pulp of grapes over all others, but Dr. Barton prefered the strawberries, perhaps the latter comes to greater perfection in this than any other Country

Grapes, have been prescribed in Dysentery, but they are very improper except the juice. Of the dried fruits, we may say that they are good in costive habits. Many of our own fruits dried have excellent properties. The roots, leaves, stems, &c of several vegetables particularly the varieties of the Cabbage are much used as wholesome aliment. Among these we may use the Cauliflower. Many of these is indigestable & improper for the female stomach. Cold slaw is less apt to disagree with the stomach than any other way in which cabbage is cooked. Perhaps the same may be said of Celery as a general rule we may say that the leaves & Cole are flatulent. The Carrot is very tender & a good vegetable, but not very easy of digestion. I now hasten Gentlemen to another very important article of our course, the Potatoe, this as I have before told you contains much fecula, about 1/4 According to Sir H Davy. In Gout, diseases of the bowels, it has been accused of inducing flatulency &c. But certainly is one of the most safe and valuable of all Vegetables & when mixed with flour makes an excellent bread. Upon the whole it is one of the most valuable & wholesome vegetables we have

I refer you to Dr. Cullen for the remainder of the Vegetables and go on to say something of Animal food. But first we must recollect that the eccentricities of the human stomach are very great. Dr. Rush said that the stomach became shy of new acquaintances. This is not quite so correct as another observation of his that green peas when they first come almost always produce colics &c. That Animal food was intended for man at the present day is not denied and it has been used in all ages, and in all countries. The Flesh of Ruminants has been said by Cullen to be the most proper aliment, because it is already assimilated to ourselves. This is a futile argument & would prove that Blood was the best food for us. When we know that blood is one of the most indigestable of foods. It would also reject the Cerealia as they are dissimilar to our fluids & solids. Now the Cerealia is among the substances most easily converted into chyle & Dr. Cullen must be wrong. It is not necessary here to enquire what are the peculiar properties of Animal food, the ultimate composition is of little consequence to us & chemistry has thrown little light on the subject of comparative Nutrition.

Dr Cooper of Carlisle has given some opinion relative to the nutritious qualities of foods &c to which I refer you and I hope that you will not forget that that the process of digestion is performed by the Gastric Liquor. The flesh of Carnivorous animals is not so good as others, old authors have endeavoured to account for this, on the principle of Alkalescency, but this is entirely unworthy of notice. The tenderness of animal flesh is influenced by sex, age &c. The female is more tender than the male. The male is more dense. and Castrate animals are better than the male who can propagate his species, we have evidence of this in our beef &c. Age also influences the flesh of animals it becomes more dense & tough as the animal becomes older. But lamb or veal is more difficult of digestion than Beef or mutton. Dr Hordyce says that veal is very indigestible. Pork also should be eaten in small quantities, but not fit for our climate. We should prescribe vegetable diet for our Patient entirely in this country. We may lay it down as a general rule that fat animals are more easy of digestion than poor ones — more gluten in one than in others. Some part of Beef are more difficult of Digestion than others you all know how this applies to beefsteaks.

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The Blood, glands, ligaments, tendons &c. you all know are not to be digested but after long boiling and then they become a wholesome article of Diet. By being made into a Jelly by Papins digestor they are an excellent aliment. These Animal substances are very good for the quantity & quality of the nourishment contained in them. The Flesh of the Cow is composed of Gluten & fat but less than that of pork. You know how much the flesh is altered by castration, that the Bullock is tender & the Bull tough. The capon differs from the cock. Veal when just killd is difficult of digestion, but when kept two or three days it loses that stringy appearance which you find at Table. Mutton shouldnot be killd before 6 or 7 years, at this age it comes to perfection. They say in this country that our mutton is not so good as in some parts of Europe, but we do not attend to perfecting it, or it would be equal to the English or Welsh. Pork has its fat more completely diffused throughout the cellular substance more than any other meat, and is improper for the Sedentary, but fresh pork with much vegetable aliment is a proper food for the healthy. The wild meats of our country are very good. Our Venison is perhaps the best in the

world & very easy of digestion, both when fresh, & when long kept. It is not very nutritious. Judge Cooper has said that Bears meat is the most nutritious of any in the world, but from its scarcity does not promise to be very usefull to our country.

Birds, supplies us with some of the most luxurious articles of the Table. Their Flesh differs from Land animals, and those of them that feed upon Flesh are not good. The Duck though it sometimes eat flesh is very good. The Turkey stands at the head of these & in this country is very large we have it weighing 25 lbs. The common fowl differs little from the Turkey, the soup made of them is one of the best things for the sick. An Old cock or hen is one of the toughest things we can find & should be boiled several hours. An old fowl contains much gluten, the hen is more tender than the cock & the capon is better than either. In America the capon is almost unknown, while in Europe & India they are very common. The Goose & Duck are more difficult of digestion, than those which have been mentioned. It would consume too much of our time to enter into a minute discussion of these, you will therefore—

read Cullen. Dr. C. has said that the blood rendered the animal more alkalescent & has accounted for being so good. Of all these the canvas back duck is the best & Dr. Barton said that it was because it lived on vegitable matter. It is a most delicious meat for a winter repast when we want a highly Nutritious rich and Stimulating Dinner.

Lect. 6 Nov. 15th.

At our Last Lecture we commenced the consideration of the subject of animal food. Among these may be mentioned Eggs. They are the most nourishing and least stimulating of all animal food & the most easy of digestion. This opinion is old as Aristotle & was repeated by Harvey. Aristotle said that which would nourish the child must be good for men and we think a soft Boiled Egg, along with an oyster to be the best food for convalescents, and hard boiled eggs the worst. The White of a hard boiled egg when dry will scratch glass. The only egg we use are those of the hen & occasionally those of the Duck. Eggs are much used in countries where religion prevents the use of flesh.

The different ways of cooking eggs as omelets &c are alleg healthy than soft boiling. When you use them for your Patient dont forget to cut off the hard parts. Poaching eggs by putting them into hot is a good way of cooking them. When boiled they should only be left in 2½ minutes, after the water begins to boil. Eggs are often used to give flavour to other foods as veal cutlets oysters &c. When these are cooked with flour they are not so good. But I shall resume the subject when I get upon cooking. Eggs with brandy & wine are the most proper nourishing & supporting thing we can use in Typhoid cases. Eggs & sugar is extremely nutritious, I now speak of both parts of the egg. Galen prefered the yolk and I also prefer it as the most valuable part of the egg. But we should be carefully always to have our eggs fresh, stale Eggs are not so good, if they have the least sour which does not belong to the fresh egg they are not fit for use. Let before mentioned they are among the best articles for patients in diseases of a typhoid type, and in the typhoid pleurisy which raged in this country a few years past, they when mixed with wine or brandy forming what is commonly call Eggnog were very efficacious in supporting & raising the patient.

The next animal substance that I shall mention will be fish. In some countries or in the South of Europe they constitute all the diet of the Inhabitants. Haller says that is probable that Fish was the First animal eat by man as food, because he would taste that one which died without a groan. Herring and Shad afford subistance to more people than any thing & the quantities sometimes caught at a haul are almost incredible. It has been said that in the Potomack 372.500 were caught at one haul. There seems to be as much difference in different kinds of Fish as in flesh. Cat fish and some others are more difficult of digestion than Sea bass, Sheepshead &c. Mackerel, Eels and cat fish are to most difficult, but the palate should govern us in their use. A diet of Fish is suitable favourable to generation. This is not confirmed by experience. The Esquimaux & others live almost entirely upon fish and are by no means fruitfull. From what I have learnt I believe fish are not favourable to Longevity. It appears that the people who live on them never survive 60 or 70 years. Friar Bacon said that fish was antiseptic but as the doctrine of putrescency in the living body has been exploded, the conclusions must fall with the original proposition

We dont think that people subsisting on Fish are less subject to inflamatory diseases as they are when they live on vegitables. When the Catholics use it for 3 or 4 week they mostly become weak, it may be determined positively that fish is less nutritious than flesh, Dr. Cullen opposes the opinion of Haller, but we can decide pretty justly by reflecting on the comparative qualities of Bacon & fish.

Oysters, these are a species of shell fish more perfect in the United States than in any other part of the world. Some Europeans do not like our oysters at first but after eating them for sometime prefer them to all others. The English oyster are much smaller & much Inferior in quality to ours.

There are some aliments also used as condiments, among them are oysters. The best way of ~~carting~~ eating oysters is raw or roasted, when fried they are not so good, it renders them difficult of digestion, Bread soak in the oyster Juice, constitutes one of the most safe, pleasant & agreeable thing that sick people can taste. Dr. Physick who was the first that use, has found them take it when every thing else has been rejected. I wish you to remember this.

Clams are tougher & harder than the oyster and used mostly to give flavour to soup. With respect to snails & which are eaten in some countries I shall say little of these but they are used by cancer cures. They first kill the snail with salt and then put it into phagedenic ulcers. I avoid the natural history of all these you will perceive, and include them under the general name of shell fish. But these last are insects. Dr. Cullen has made no distinction between the Lobster & crab but the Lobster is much more tough and has less oil than the crab. The crab being less dense & tough is therefore easier of digestion — we have a soft crab in the Chesapeak which is very good. But the Lobster is the most indigestible of all these, one of them is taken with salt the other with mustard & other condiments. We often find colic, cholera &c produced by lobsters, never by crabs. Of Amphibious animals there are few in this that we eat. I wish we did not eat snakes, we have several instances of this recorded and Dr Barton mentions that several British officers eat the soup of the flesh of the Rattlesnake. The viper has been also used, but I am glad to find this loathsome reptile is no longer mentioned in the Mat. Medica

The sea Turtle, snapper & terrapin are all used
the French are peculiarly fond of the soups of these.
The Flesh of the snapper is tough & insoluble.
The properties of these soups depend much upon the
condiments used with them and they seem lit-
tle superior to seal. The Terrapin is better
than the snapper and the Physicians here
now give it to their patients with safety.
The Epicures say it should be cooked with butter
and pepper alone.
Milk, next claims our attention and the dif-
ference between a womans milk & cows is
known to you all. Milk you know is composed of
curd, oil & water. Cows milk when fresh
is nutritious & medical men have said ~~have~~
~~said~~ because it is similar to chyle it must be
easy of assimilation. But as we have before
said, if this were true, blood would be the best
food. Milk you will recollect is coagulated in
the stomach & subject to the common course
of digestion. Milk you will recollect is coag-
ulated in the stomach & subject to the com-
mon process of digestion. It does however constitute
an eligible diet for persons in early & advanced
life. Early life particularly it is proper, but in
advanced life the stomach dont bear it so well,

it being apt to produce acidities of the stomach. In many diseases we are under the necessity of prescribing milk & it is the most important remedy we can find. I witness its good effects in a venereal patient whom I saw in consultation with Dr. Rush, he was to use his own words rotten with the Pox and a caput ad calcem was one blotch of loathsome ulceration. He was put on a Diet of milk & bread & in a short time was so much recruited as to be out of danger.

Lecture 7th Nov. 1818

At our last lecture we considered milk as a diet and I gave you some cases in which its efficacy in removing diseases was evinced when unaided by Mdc. During the reign of the humoral pathology, milk was recommended because they thought that it was immediately converted into chyle. Dr. Cullen has said that it is good in cases where the fluids are vitiated &c. you know we at the present day have discarded the idea of vitiation of the fluids by putrescency. But you will not forget that milk in Debility induced by whatever cause is our most important remedy. In lues venerea & many other diseases where the powers of the system are exhausted & in Cancer par-

particularly you will find it in the most important article of the Materia Medica. A Lady was under my care with Cancer, she suffered much from pain & seemed to sink daily under the irritation produced by it. I put her on a diet of milk and vegetables and she was much relieved by them. I hope therefore that Chronic Lues & Cancer you will not forget its value. In Phthisis milk has been much used & Ayres is still a popular remedy (here a story from Van Swieten). There are several other kinds of milk used but we should not use them unless we are necessitated so to do. Milk soon loads the Bloodvessels & has done mischief in inflamatory diseases diseases and in some stages of Phthisis. A diet of milk is too nourishing in these cases. Whey in some cases is very useful, but we may give the milk in those cases where the febrile action is not increased by it. We have before mentioned that milk is a heterogenous fluid. The cream floats upon the top & the greater the surface we expose the greater the quantity of cream will be obtained. Butter is a highly nutritious substance made by churning cream, and possesses all the properties of Animal fats.

The coagulation of milk is effected by several means, by suffering it to stand, by adding rennet &c. after the curd is dried it forms cheese. This differs in quality according to the different qualities of the milk from which it is made. They are all nutritious and stimulating & are proper food for the Laborious. Skim milk cheese is among the most indigestible of all food. Cream cheese is easiest of digestion & resembles butter more in its composition. I have called your attention before to their property of checking diarhoea. I mentioned to you a case in the Pennsylvania hospital, he was a venereal patient much exhausted by the disease & weakned by Diarhoea. Various remedies were administered without relief. I gave him cheese in various forms, toasted &c it was very usefull to him. This though very insoluble in the stomach, is very good for the hard working and those also who undergo much exercise. The oil of old cheese has been applied to old ulcers of late with very promising success. A case of ulcer in the nose was cured by Dr. Physick & myself with this remedy, which had resisted Lunar Caustic, Sea Water &c. The older cheese is more stimulating & acrid it becomes Epicure, prefer it old & mouldy.

The whey constitutes by far the largest portion of milk. Dr. Young of Edinburg has proved that 7/8 of the whole quantity of milk is water, oil, sugar & several other things are found in milk. The whey of the milk is unquestionably the most proper part of the milk for pulmonary consumption. In dyspepsia frequently an obstinate disease, you will often find milk to disagree with your patients, & here whey will be best part you can employ. Butter contains much oil & is therefore nourishing & buttermilk has been advantageously employed in some diseases. Dr. Shippen used to relate that a patient of his was benefited by using it. Wine whey is among the most pleasant & valuable ways of preparing this for the sick & I hope you will all make yourselves acquainted with the manner of preparing it. — You Boil your milk & while in a state of effervescing add half the quantity of wine — Madeira, Sherry or Teneriffe — You then heat it again to the boiling point and strain it through muslin. You will also take care to take out the curd whole & not break it. Strain it through a thick sheet of muslin now if you want a weak wine whey, to add less wine will not make it so, but you must dilute

The strong wine whey with mucilage of Gum Arabic you may add about 1/2 to 1 pint of the whey which makes a gently stimulating & very nourishing drink. Dr. Barton thought it difficult to produce intoxication with wine whey because the alcohol evaporates, but still we are able to produce intoxication with it. Milk punch is another way of using it, but it is improper where the powers of the alimentary canal are impaired. It is made by mixing rum, sugar & milk together, and grating a little nutmeg on it. You will therefore be cautious how you administer this in weak habits & where the stomach & bowels are disordered. It is usefull in chronic debility but in most cases of convalescence wine whey is better. In the typhoid pleurisy which has prevailed in our country milk punch has been mixed and often with good effect. The Chemical History of Milk I have omitted but refer you to Dr. Cullen & others. This finishes what I have to say respecting food from the animal & vegetable kingdom. Dr. Barton was in the habit of mentioning calcareous earth, with carbon &c as nutritious, on them only shall we observe that the human organs are capable of converting almost every thing into a kyle.

The Physician, Gentlemen, must often go from the chamber into the kitchen and therefore I shall next give you some observations on cooking.
The science is the application of heat to the very purpose of preparing our food. Some articles are ~~[illegible]~~ improved by heat & others are not. Cabbage & beans are not improved by cooking. Turnips when raw seldom produce indigestion. Apples when roasted are much better than when in their crude state they become much less flatulent. The Indian turnip you all know when cooked becomes a mild esculent. The cooking of animal food also has different effects upon it. The object of cooking is to render it more savoury, soluble & easy of digestion. Keeping meat a few days after it is killed renders it tender as we find in poultry & venison. The game which is killed in the highlands of Scotland is used in London, six weeks afterward, for the table. We know when it is kept too long by its putrid state. Rancidity is another thing to which animal fat is subject & the goose & duck are often so from keeping. There are certain condiments that deserve a place in our house & the most important is Salt. It is the best antiseptic we have & is used for preserving our animal food from putrefaction.

When I say antiseptic you will understand me as only meaning a matter which prevents from putrefaction out of the body. Solomon has wisely asked "Is there any taste in the egg?" He might have asked the same of all animal substances in their natural state. Salt meat may be set down as the most eligible food for laboring men. Pork & beef are chiefly used in this country. Beef, venison, & mutton are often dried & smoked & used as a relish, you will often enquire of your patients if they are in the habit of taking much of these, especially your Dyspeptic patients to whom they must be positively interdicted. Bacon forms a good part our diet in this country. We have before stated that Pork is more indigestible than Beef or mutton. When we eat ham we are apt to eat too much food and it alsocoates thirst. You may give fish, for its stimulating, & not for its nourishing quality. You will recollect that I differ from Dr. Cullen on this point. Salt provisions have been celebrated in Cholera Infantum &c but they are to be suspected & are often dangerous. Mr. Goldsborough of Maryland had a child that had been troubled with Cholera for some time, at length he brought it to Philadelphia, I attended the child & they seemed disposed in its convalescent state to give it a slice of ham. It was obviously

worse for it & was almost killed, it had previously lived on Arrow root. Two other cases of a similar nature have occurred within my knowledge. So much for Ham in Cholera Morbus. Dr. Rush was in the habit of giving animal food in form of Ham. We should when we use hams boil them, in the manner recommended by Dr. Rush who got the mode from Mr. Jefferson, viz. to boil them twice. I am surprised at an observation of Dr. Willich on this subject. He says boiled hams are not so digestable & prefers frying them. This is a great Error, when boiled in the way recommended by Mr. Jefferson, they are far from being indigestible. When boiled they contain much empyreumatic oil, for a state of health & in warm climates they should be often used. Dr. Cheine says much against their use — he raves like a madman. They are certainly a proper food where the powers of the system are unimpaired, but to the convalescent & valetudinarian, they must given with caution. Fish are salted & constitute a great portion of human subsistance. Shad & herrings, are the most common. They as we have before said contain little nourishment, but their stimulus are very good. Vinegar, this when used to excess injures the powers of the stomach. Dr. Rush has very

properly compared pickles, to vinegar in a solid form. One way of applying heat is by boiling whereby the food is rendered more soft & soluble. Raw meat is longer in undergoing the digestive process than when cooked. The Indian who has a long voyage to perform, prefers his meat raw, & laboring people prefer sausage &c. In some cases the soup is better than the meat & Count Rumford found that the potatoe lost 1/40 of its weight by boiling. The French carry the art of cooking to the greatest perfection. They boil their soups for a considerable length of time, they take 5lb of poor beef & boil it 8 or 10 hours over a slow fire. Skim of the fat & lay it aside, then expose the soup to cold until the oil on the top congeals and you can get the whole away. I wish to caution you against a common dish for the sick. Calves foot Jelly as it is used is adapted to few cases and is in many instances improperly used. These things may seem unimportant & ill suited to the serious occupation of a public Lecturer, but Gentlemen, you will find them of usefull practical application, & seldom do you find a nurse who can make soup rightly. Another thing you will observe, viz. not to suffer flatulent vegetables to be put into your soups & do not suffer them to be thickened with flour.

you want a preparation of Beef only & tell your cook to — I speak now of cases of the stomach being disordered or the bowels out of order. These soups are very important for the sick & convalescent, & old people &c.

Beef Tea, you should all know how to make it, cut your beef into small pieces, wash the blood out of it & then boil it taking care to scald it first — boil it in a covered vessel. Dr Sweiten says that the animal should fast previous to killing. this is an useless refinement. Chicken broths & soups are not to be used in Inflamatory diseases. They are not less nutritious than Beef Tea. Chicken broth is often improper in yellow Fever & even fatal and in that sickly state of the system, is one of the most dangerous things that can be given.

Lecture 7th

We in our last lecture said something of cooking & the best way of making soup for the sick. It is not necessary to enlarge upon it here, we shall only add that various spices & wines are sometimes added to soup the only serve to render it more stimulating. Calves foot jelly you ought to reprobate as a dange- article of diet for the convalescents. You know that it is mixed up with spices &c &c. & is not for the sick. Beef Tea is much better. The very bones of animals may be made into soups & jelly by pepsin digesta but such soups have a soapy taste & are not savoury. A Method of preparing vegetable soups, when low is required, has been practised by Dr. Physick, & in this city is known by the name of Dr. Physicks soup. Take three large potatoes, an onion, & a slice of bread & three pints of water, boil it down to two, season it with salt &c. to give it flavour. It is an excellent weak soup & is not so stimulating as Chicken broth. If you have a mind to call it chicken Broth to suit the partiality of your patients, you may put a chicken wing into it. In roasting flesh the aqueous parts are evap- orate & it is more stimulating that when boil, Count Rumford invented an oven for roasting meat, it is of great importance to the cook.

Broiling is a rapid way of roasting, the juice is confined after the outside is crisp and is among the best ways of preparing flesh for the table, Beefsteak, mutton chops &c are cooked in this way. Frying under certain circumstances is steadily to be prohibited particularly in flour &c. Stewed meats are unwholesome There are many condiments used, of salt I have spoken. pepper, mustard should be mentioned, they all stimulate the tongue & are improper in inflamatory diseases. But most powerfully condiments is capsicum, It is important as an article of mde. Vinegar also is a good condiment when used in a quantity that is moderate.

Drinks, of these the most proper is water, it is proved by those nations having best health who use it exclusively. Water is often impregnated with mineral substances &c in this country, the water of springs, wells, & rivers are good except when in the former, we find lime, salt &c in solution. Next to simple water, the infusion of certain vegetables, in the form of Tea, as balm, sage, & next apple water. Then mucilage which is a solution of gum in water. The mucilaginous matters may be called the condiment of drink. Many other fluids might be mentioned but as they all contain much water it is not requisite to notice them.

From the days of Noah to the present time, mankind has been attached to ardent spirits. The Physician, is bound Gentlemen, to wage continual warfare with this Hydra of calamities. In America we have an excellent substitute for them the Cyder. Among the most healthy of our people are the Inhabitants of the Eastern States who use much Cider. It contains little alcohol, but is not to be used in Gouty habits, or habitual disorders of the alimentary canal or digestive organs. Small liquors are used in this City as in European Countries. In London agreeable to a report made in 1800. 1,333,178 barrels were made in that City alone. Barley is principally employed for making malt Liquors. It is put into water untill it germinates &c. Of this porter & ale are made, in addition of hops are very usefull as it qualifies the effect which the alcohol would have on the stomach. Porter is the most perfect preparation of malt liquors, both are nutritious but porter is much more uniform in its qualities than ale — Table & small beer are the same with the former, but contain less alcohol. These are all good drinks for the active & laborious, but not for the flatulent & sedentary, for such wine is to be prefer'd.

Wine is composed of tin acid, alcohol, sugar &c. & is not so nourishing as malt liquor. Its most active ingredients are alcohol. A number of experiments were made by Dr. Bland 1811 & 13 on wines, in which he found that Port wine contained from 22 to 26 pr. cent of alcohol. Madeira 19, 21, 24. Claret 12, 16. Sherry 18. Lisbon 18. Champaigne 16. Red Sherry 11. White Do. 12. Burgundy 14. Now all this does not comport with experience. Ale from the experiments contained 9. Porter 6. Cyder & Perry 9. But Cider in this Country is much weaker than Porter. Brandy & Rum were 53. Holland Gin 51. Port wine nearly half as strong as brandy. The wine most used here is Madeira. In low states of disease this is the best. Teneriffe & Sherry, are the next, as they approach nearer the ~~Madeira~~ ~~wine~~ Madeira than any others. The London particular Teneriffe, as it is called the best. Lisbon wine contains too much sugar. Champaigne is stimulating in a high degree. I have used it in Typhus fever & found it excellent, the pulse rose under the use of it. I think it is to Madeira what ether is to alcohol. Port wine possesses considerable astringency it is therefore used in the diseases of

Judge Cooper says that in England that port wine is composed of Sloes, Elder Berries, water alcohol or brandy. The fresh wines are all more or less acci-dent & should be interdicted to persons afflicted with the gout. The old English swillers often attribute their Gout to the low French wines, this is nonsense. The French low wines are much like our cider and no stronger. They make the best wines and are the most temperate of all European nations. The Peasantry consume wine, much as we do cider. In this Country we have wine of Gooseberry, currants &c. all bad, they become to soon acci-dent spirit. Brandy, rum &c. You will not forget that one half consists of Alcohol, and to this they owe their active principles. You will be often asked is brandy, Gin, or what is the best. Common people say Brandy. There are no dont cases where brandy is usefull. I shall conclude with saying with Dr. Rush, had I a thousand tongues I could not portray the evils arising to society & mankind from these liquors. I must conclude this subject by doing an act of justice to Celsus who has undoubtedly done good on Diet &c. Of Food, man can adapt himself to any food. The quantity use-

can take cannot be definitely ascertained so many circumstances vary the call for regimen, but experience is our only guide. We should take that which best agrees with us. The diet of the ploughman should differ from that of the student. Children says Dr. Rosean eat more frequently than adults, their mothers milk first — then bows — then cereals of which arrow root is the best. It is retained on the stomach. Make it into a paste & boil it & sugar & water. Sometimes with bows milk. Children should subsist on vegetables in a great measure till puberty: Increase the stimulus with the age of your Patient, but very gradually.
Dr. Cheine has advanced a different opinion & says we should descend out of life as we ascend into it. He is wrong: old people should have short intervals between their meals. At what time of life, the use of fermented liquors should be commenced, we cannot say — If you have a Patient who has been accustomed to a Luxurious diet, we put him on a low diet by simply withdrawing his wine. A temperate man to be put on a low diet will require bread & water. Men have differed with respect to the number of meals to be eaten in a day, some say one in 24 hours others say rise at eight.

The common and most natural mode is the best several times per day. Breakfasts & Teas are mostly light meals, we should not eat supper & go immediately to bed, such a practice I warn you against as unfavourable to health.

Lecture 8th Nov 21st

It remains for us Gentlemen, to make a practical application of what we have said on the subject of nutrientia. We shall as you may expect confine our remarks to the diseases of the U.S. There are some diseases in which we must use a very low diet as inflamation of the Brain, here Toast & water will be sufficient to support the patient & to keep down the action of the heart & arteries. Patients can live long on this alone, but we cannot tell how long an animal may live without any sustinance, Le Gallois says a rabbit lived 3 weeks, and a Physician has recently given a case where a patient lived Forty days. Toast water may be given in every case of acute inflamation. Teas may be given also but without any sugar, & cream, when we wish little nourishment as by these are rendered more Nutritious. That a diet of Bread & water, when taken in a small quantity

weakness, we know by Mr. Starks experiments he lost 5 lbs in weight when he lived on bread & water & only ½ oz daily. But when he took 38 ½ he fattened. Another article for the sick is panada. When made simply of Bread & water sweetened it is a good nourishment. A list of these may be given nearly in the following order — Soap water bread & water, weak panada, Barley water if not too rich is good, but when much boiled it becomes almost as strong as animal food. Linseed Tea, Gum Arabic & water are also among the mild mucilaginous Nutrientia. Chocolate has been much used for the sick, but it contains much oil & is apt to become rancid on the stomach & indigestable; but the oil of chocolate may be skimmed off & then it agrees better with the stomach. Another form is the Infusion of the shell of the Cocoa — call chocolate Tea, Summer Fruits, boiled rice, arrow root &c are all among the proper food for the sick. We shall now say something of the animal aliments for the sick & convalescents. The first we notice is the liquor of the Oysters & Clam Sir George Fordyce has said that all shell fish were improper for the sick as they were indigestable.

But this is not the fact. The shell fish differ as much in their digestibility as the different kind of flesh. But we no of no better food for convalescents than oysters when taken raw or roasted, but they should not eat the part which is attached to the shell, this is a sort of tendinous substance & very difficult of digestion. The oyster liquor is one of the most pleasant and agreeable things that we can give to our patients. Dr. Physick often recommends it among the first things to his patients. He tells his Patients to dip a bit of bread in the oyster liquor & eat, it constitutes one of the most grateful articles that can be given to the sick or rather convalescents. Soft boiled Eggs are next to be preferred for the purpose of Nutrition - but you must always adapt your food to the state of the system. Then comes in Fish, Fowls &c. Pheasants and other poultry become more easy of digestion by keeping except they become putrid. But Geese & Ducks are apt to become rancid if left long & by this they are unfitted for Nutrition. Invalids should observe their usual hours for dining. Salt shad may be used when we want the stimulating without the nourishing effect of diet & the contrary — vice versa. — —

In Typhoid Pleurisy, stimulating diet is very important, milk punch, wine whey &c are all very usefull remedies. Besides the true disease, we often have another mind where depletion is often proper & a bleeding or two may be requisite. Scurvy this disease has often been confounded with other eruptive diseases of the skin. But the scurvy of which I speak is the genuine kind, with lassitude, weariness, dejection, anxiety & oppression — as the disease advances the countenance becomes sallow, & bloated, respiration is hurried by the least exertion, breath offensive, night pains come on, the pulse is small & frequent. The Gums swell, become spungy and bleedy upon the slightest touch, the teeth become loose. Petechia & macula appear in various parts — Spontaneous ulcers take place & the slightest scratches becomes sores, the joints are stiff & swell, the tendons of the legs become rigid — bowels irregular, urine high coloured, with a pellicle of an oily appearance, emaciations, hemorhages from the nose, ears, extremities of the fingers &c excretion, become fetid, but the appetite is often good & intellectual faculties unimpaird, Death ensues. The skin is often like Cutis Anserina & dysentery is apt to ensue, which is mostly mortal. In this disease you know a vegetable diet has been considered a specific.

Summer Fruits &c are of the first importance. It has been known & observed that patients either die in 48 hours after begining to eat raw vegitable matters, or survive the disease. A Mr. Smith surgeon of an English man of war says he gave potatoes sliced in vinegar with the best effect. Blane says that the vegitables must be fresh & that fresh lemons are much better than any others.
In Dysentery all acrescent matter is to be strictly prohibited, animal food is too stimulating. Sago, arrow root, rice, Gum Arabic &c are the only nutrientia for the first stage of Dysentery.
When the inflamatory stage has subsided you may give beef tea, weak soups &c.
Cholera Morbus, There is no disease where diet will do more independent of medicine, than in this. Mucilage of Gum Arabic sugar & Lime water are very good here.
Dyspepsia, In this disease we must give animal food and that which does not undergo fermentation no acrescent food of any kind should be allowed.
In Gouty constitutions, cases have occurred, where vegitables have prevented & cured a paroxysm of Gout. A noble duke was imprisoned in France & his gout was cured by it, he came out regenerated in every fibre, vigorous strong like Lazarus from his tomb.

The use of vegitables in preventing, moderating & curing Epilepsy is worthy attention & Dr. Cullen has made some usefull observations, to which I refer you. In consumption vegitable diet prolongs life, in cancer it assuages pain. But the causes of disease to which it is applicable are too numerous to mention. But we must change our diet. Dr. Rush use to consider heat among the condiments. Hot Teas & aliments are all adapted to different diseases, accordingly we find Ice creams, cold water &c all have their uses and have produced death by being taken into the stomach in large doses in warm water —

November 22d

In Sickness attention should therefore still more than in health be paid to the proper temperature of the food especially in hemorhagy. Valetudinarians should eat frequently and in small quantities so that the stomach may never be full nor empty. Patients whom we find extremely difficult to induce to take food have sometimes been induced to eat by seeing other eat with avidity —

Coffee and Tea — Dr. Percival found Coffee to contain a portion of astringency and

and was more considerable so roasted than in the raw state. Coffee probably contains considerable nutriment — it would appear from the experiments of Percival that Coffee has a power of preventing fermentation. It appears from the same Gentleman that it has the power of relieving the Sick Headache. Its action on the Nervous System is probably derived from the oil it contains. In roasting this becomes in some measure Empyreumatic — Coffee assists digestion, strengthens the stomach &c — In delicate habits, however it sometimes induces watchfulness, tremors, &c — Coffee says Dr. Pringle is an excellent remedy in moderating a fit of the Asthma — Its good effects after a large dose of Opium, I have experienced in several cases. Tea when weak and mixed with Cream & Sugar (moderately employed) is a nutritious beverage it is of no value as a medicine —

Of the Materia Medica propria —

Teachers of this branch have made frequent complaints of the difficulty of arranging the subject. The proper Method is I think to divide it into and describe in succession those Medicines — which most resemble each other in their effects upon the system — The only mode of obtaining true information of the properties of Medicines is

is from experience. Diseases consists not only in an alteration of the mode of action of the different functions of the several organs, but frequently in the degree of action — These are opposite states of disease requiring different classes of medicines — Stimulants & Sedatives — By the term stimulant is meant any thing that is capable of exciting the action of the moving fibres — I think the property of exciting sensation is to be included in the definition on the contrary Sedatives are such substance as diminish the motions and powers of the human system. To exemplify the effects of we need only observe the operation of Ardent spirits upon the human system — the sedatives would produce contrary effects (whatever changes take place in the body during health and disease are produced by impressions that implies the production of a new action, so that I may conclude all medicines capable of producing an impression are Stimulants — It has been much the custom to consider as a Sedative certain passions of the mind as Fear, and certain impressions on the system as Cold, but their Sedative qualities are very doubtfull — Fear produces secretion of urine now this is proof of an action excited and proves its cause to be a Stimulant. The effect of great terror also is action, as the secretion

of tears, and the action of the Intercostal muscles
Cold produces abstraction of heat, contraction of the
skin, in Shivering &c — The question of the
Stimulative effects of cold is of much importance —
at a temperature of 62° the body has but little
sensation of heat or cold, but any deviation from
this temperature produces a sensation — contrac —
tion of the skin, a stoppage of perspiration are pro —
duced by a diminution of it — as also rigors & Shivering
The frequency of the pulse is diminished, but sometimes
the contrary is the case, death ensues local or gen —
eral according to circumstances. In reviewing these
phenomena we shall perceive stimulating effects —
The paleness of the skin is derived from Muscular
contraction either in the skin or vessels, Shivering
is produced whether we immerse the feet in hot
or cold water — I once held in my hand a frozen
portion of quicksilver and it produced the sensa —
tion of a burning coal — These effects it is true
have been accounted for on the supposition of
their being indirect stimulating effects, but this
is not true — Dr. Cullen considers cold as a
stimulant or sedative under the different in
which it is applied. If any other arguments were
necessary to make out our Theory — I would bring
forward the effects of cold in Asphyxia — in

in producing contractions of the scrotum, in curing hemorhagy &c. Cold diminishes the pulse in frequency so do other stimulants as brandy — I have known it made slower by this article and Dr. Rush has witnessed the same effect — Cold may then be considered as capable of producing real stimulant effects this is all I wished to prove. There is no such article we may conclude from the foregoing, as a direct sedative — Every deviation from the natural state of the body is productive of a stimulative effect — It is very often important that no misconception should exist on this subject, there is no doubt indirect sedatives thus Sulph: Sodae by their stimulating effects increase the mucous secretion — the discharge of which debilitates the body more than once in passing the bougie in the urethra (which is certainly very irritating) I have seen Syncope produced. I have also seen the same effect produced where a much greater stimulous has been applied: viz: in the injecting of the Tunica vaginalis with wine — certain odours it is also well known produces fainting — I would wish to be understood to express the term Stimulant, those articles which excite the body to action and in this sense I shall employ it in preference to the term Narcotic made use of by Mr. Murray. It is evident that articles possessed of the most stimulating action, have also other properties thus opium under certain circumstances is highly stimulating & under other Narcotic —

Of the Modus operandi of Medicines

Having in another Lecture expressed my opinion with respect to life and having discussed above the subject of Stimulants it is now proper to consider the manner in which the latter effect changes in the human body — From the earliest period of Medicine this has been a subject of great enquiry, if the Question were merely one of Curiosity it would be worth the investigations but it is doubtless most important in the practice of Medicine — Anatomy, Physiology & Chemistry, are of importance to aid us in the enquiry, but all combined cannot solve the difficulty: the only theories which have been advanced on this subject worthy of discussion are those which are now in vogue there are Two — 1st The Humoral & 2dly That which conceives medicins act only on the Stomach — There are many Medicines, which no doubt act by producing an impression on the stomach without being taken into the circulation as wine & opium which act too suddenly to suppose they act through the bloodvessels these act by sympathy; when persons heated by exercise and drink cold water they are "destroyed" by the effects of the cold being conveyed by Sympathy to the system — Thousands of other experiments prove that substances by producing an action on one particular part can have their action communicated to the rest — The next question is whether there be any body capable of being absorbed

into the body. This is doubtfull whatever is exposed to the action of the digestive apparatus it only produces chyle. There is no doubt however, that certain changes may be produced in the animal fluids &c by the food — The wild ducks flesh is always fishy from its aliment and the colour of madder on which young animals have been fed can be detected in the Bones by the late experiments made by Bostock it appears that the Blood and urine of persons who have been taking Soda for any length of time have been found to contain traces of that substance, Nitre has also been detected in the urine. The Theory which supposes that though these substances have been destroyed by digestion but that their elements have again recombined is perfectly visionary. The fact above recited I admit, but there are others which I cannot, as mercury being found in the bones — lead in the spittle and the chylo system being acted upon by medicines taken by the nurse. The ground I maintain is this, that we cannot at will, introduce active medicines into the blood-vessels but that changes are produced sometimes in the blood by certain articles, I maintain that most medicines act primarily on the Stomach and by Sympathy on the residue of the system. Mercury when administered produces a general fever and a local inflamation of the salivary glands which is not explained by supposing the article to be absorbed — it excites the Stomach or Skin but how we know not. If the mercury be taken into the vessels the effects should be

if it be said that it can only excite certain glands I ask how can it excite these except by sympathy, this must still be called in to explain the circumstance whether Mercury act upon the stomach or upon the arteries and other parts from those to which, it is applied take on action however near or remote such part may be sympathy still acting. Whether the medicines act by the Circulation therefore is of no consequence because their operation is still doubtfull at this we are not to be surprized for I will undertake to explain the action of every medicine so soon as any other point in Physiology is established. Some writers explain the operations of Medicines by supposing them to be all Stimulants. The Stimulons of each variety being determined to particular organs. I now proceed to mention the order in which I intend to treat of the Materia Medica —

I shall 1st. Divide them into 2 Classes the

1st Evacuantia; at the head of which I place Bloodletting — Then all those Medicines that excite secretion from the different organs — as Emetics

Cathartics
Diaphoretics
Diuretics
Emenagogues
Sialagogues
Anthelmintics and
Epispastics —

Class 2d. Stimulants, or Excitants — Narcotics, Tonics astringents — & Antispasmodics —

1

Of Bloodletting

The most direct and powerfull evacuation we possess I should consider it an unwarrantable omission if I passed over it in silence. It is a convenient remedy and during the fluctuation of medical theories it has always been considered a most powerfull agent in the hands of the Practitioner, Botellus who was as you well know the famous sanguedo-wrote a Treatise on this subject recommending it in all diseases while others have erred in the opposite extremes. Louis 13th. of France during the last 10 months of his life was bled 117 times, purged 213 and glystered 230 times, It is a natural remedy since as Dr. Rush said nature frequently performs it. By habit bloodletting looses its efficacy and by habit the use of it is made necessary, after injuries of the head it is important to bleed very largely in order to prevent an extravasation & inflamation of the brain, when some customary evacuation has been suppressed, it often becomes necessary. In this County there is a prejudice against bleeding old and very young subjects yet experience proves it to be quite as necessary and important in these cases as in any.

In Switzerland old people are frequently and

regularly bled and the health they enjoy is a proof of its utility. In Fever it is indispensable and its most prominent effect is to reduce the inordinate action of the heart and arteries and in other words to subdue the violence of the symptoms. The extent to which it may be carried in cases of disease is wonderfull. In cases of Apoplexy Dr. Physick took 90 ℥ at a single bleeding. In injuries of the head I have bled 5 times a day, nearly to as great an extent with Mr. Cline who in a similar case to 320 ℥ of blood in 20 days. Mr. Cline who was always very diffident in bleeding copiously, but in this case he has been the reverse. Haller relates a case where 22 lbs of blood were lost at once. This would be incredible were it not for the gradual loss giving time for a new supply where V.S. is much used the crasis of the blood or crasamentum is proportionally much less. During the yellow fever Dr. Rush & Physick were accused of bleeding untill the blood no longer stained their linen. This although not exactly true will shew you the effects of the evacuation. It produces a diminution of morbid or diseased action and in remittent fever should be employed when the action is most violent I have repeatedly cured intermittents by V.S. & blisters after Tonics had failed.

In continued fever vs may be used at all times Dr Cullen by condemning it in Synochus & Typhus has misled thousands who have from the fear of debility have deprived their Patients of this necessary and important remedy. In acute diseases I never would refuse to bleed. for fear of Debility, because in fever VS. is certainly the most powerfull tonic we possess. If the system is weak after the evacuation it would have been weaker without it In this Country Dr. Cullen's directions have been productive of vast deal of mischief for his practice applied to some of our diseases is productive of the most pernicious consequences.

Lecture 10th Novr. 1816 –

In 1793 and for several succeeding years our City was visited by a most fatal Epidemic. The disease which occurred are probably familiar to you all Its not my intention to disturb their ashes willingly they should be signed to silent and quietness at this period it was my fortune to study and to enquire the Elements of Medicine and to receive impressions which shall never be forgotten. That rule which from its importance

has justly been denominated the the golden
was at this time most strangely inculcated
and Physicians were taught the importance of
adapting their remedies to the state of the
system. For this disease (yellow fever) must
be employed boldly and repeated accordingly
to the violence of the symptoms. On the third
day the pulse was frequent, tense full or
depressed and required the use of the Lancet
In all these cases. V.S. must be repeated as
long as the pulse arises from febrile action,
repeated untill the violence of the symptoms
subsides. Dr. Rush that VS when not carried
to the requisite extent was prejudicial, I would
now state to you some cases in which blood-
letting is improper. It is so when the leading
symptoms are debility, as in Typhous pleurisy,
typhus &c but in the former disease if the
Inflamatory action demand blood letting I
would as leave perform the operation in
as in any other case demanding blood
letting. The late epidemic was said to be
an instance of this kind.

The cases which fell under my own observations were ushered in with Inflamatory symptoms & here I unhesitatingly resort to the lancet I refrain from V.S. because debility was to ensue was a most ridiculous practice which deserves nothing but continual reproach. There was however in this disease a deceptive pulse, easily compressed and unlike the usual inflamatory pulse of pleuritic patients Doctor Rush forbids V.S. when the viscera are gorged with blood in these cases the pulse is feeble and says the Dr. the loss of a few ℥ of blood would prove fatal. By friction and mild stimulants the pulse is excited. After they are used blood may be taken with advantage. These remarks on the engorged system are valuable but I do not think the theory is correct. Stagnation in the bloodvessels has never been demonstrated and should it take place, gangrene would be the inevitable result. This however furnishes no objection to the practice of Dr. Rush which experience has confirmed as most usefull. 3d. It is improper in the conclusion or advanced stages of Inflamatory diseases. I am sorry that

that Dr. Rush should say it is improper to resort to it in malignant fever, if not called before the third day — Death refuse with a tense and active pulse because three days have elapsed. In many cases the the pulse requires the use of the remedy even when many days had elapsed. Bleed therefore Gentlemen in every stage of the Inflamatory fever where the Symptoms demand it. The Idea that we are to refrain from bs. because debility is expected or three days have elapsed should be opposed. As a general rule it may not however be necessary in the advanced stages of the diseases. 4th. In the concluding stage of the paroxyems of intermittents or remittents bs improper. 5 In accidents through bs. is generally indicated yet in gun shot or punctured wounds in hot weather it may not be safe in these cases, this you will learn from the professor of Surgery the importance of a proper position. 6th In the same diseases & accidents which in temperate persons require bloodletting when they occur to intemperate persons we are under the necessity of using liberal stimulating remedies as in mania a potu. In the Alms house & Hospital you seen cases of this kind. 7th After suppuration

every other secretion takes place in Inflamatory diseases vs. is not required. If however general inflamatory symptoms vs is proper. After large abscesses are opened inflamation sometimes ensues it calls for the use of the lancet as much as if an abscess had not taken place. Whenever an effusion of serum or pus produces reaction, bleed. In selecting the cases in which vs is required it must in all critical or doubtfull cases direct your attention to the pulse. In such cases see the operations performed yourself because you cannot judge before hand the quantity which will be necessary. In the class of diseases which Cullen has denominated Phlegmasiae vs is the most important remedy. After removing the remote causes the first thing is to bleed in order to destroy the diseased and restore healthy action. The effects in these cases are — 1 Pain is immediately relieved —
2d Morbid heat is diminished
3d Disordered states of the functions restored, In acute pneumonia you have a good example of this effect
4th It prevents termination by gangrene or death.
5th It prevents the effusion of several fluids which destroys organization. Prevents hemorhagy prevents effusion in the Brain &c. —

I might extend this catalogue to a much greater extent. I will however mention but two. —
6th. It prepares the system for the operation of other remedies, you will often have occasion to verify remarks of Dr. Rush on this point. 7th It removes local congestion of vessels and restore them to their natural functions. These are the observations of an enthusiast. They are such as every days experience will convince you at all times in local inflamation Vs. is carried to a greater extent than in general fever I confess that I have my doubt respecting the existence of fever without local affections, having always found it to exist in billious & typhus fever. But there are cases of general fever (if any such exists) In hernia humoralis, I have bled daily for a week. After that time bled once in 48 hours which produced a speedy cure. I proceed now to speak of Vs. in particular inflamatory diseases. In opthalmia, Vs, general and local are the principal remedies. The vessels must be emptied, by the repeated use of this and other remedies. I was lately called to a case where melted brass was thrown into the eye & the conjunctiva was arrested from the effects of the heat (produced by the brass) By very liberal, frequent & repeated bleedings & by the constant use of ice water, the patient was relieved I am fully convinced that no other remedy would have succeeded

I bled as freely as if it had been billious fever, and with as much advantage. We are directed to seize diseases like time by the fire lock to take them in the forming state in no cases this rule more proper than in inflamation of the eyes. By a case in the Elements of Surgery you will see how frequently we may be obliged to repeat this remedy. Bleed as long as inflamation continues and when general vs is no longer safe resort to local remedies.

Phrenitis, Large and repeated bleedings are here necessary. Cullen reccommended opening the carotid artery or Jugular vein but this is very inconvenient of performing this operation the only precaution which is necessary that you employ the remedy to a sufficient extent.

In Mania I am fully persuaded of the superiority of the treatment introduced by Dr. Rush & Cullen rather consents to bloodletting, Rush enforces its importance & the records of that Institution where his practice was adopted prove incontestably its value; there from 20 to 40 ℔ are to be taken untill fainting ensues. Dr. Rush reccommends to perform the operation while the patient is in an erect posture. If he would be kept in this posture there would be some reason in the remark but I should prefer the situation in which he is to remain because in that case more blood may be taken without

inducing syncope. The remedy is to be used as long as ~~syncope~~ the symptoms indicate its employment. In mania a potu, patient will not bear the use of depleting remedies, I have used leeches & cupping with odorous substance as musk &c. Emetics were lately introduced in these cases by Dr. Klapp in the Alms house. I shall speak of them when I speak of Emetics

Lecture 11th Novr. 26th 1816

Sometimes after an abscess is opened febrile action ensues in consequence as Mr. Hunter supposed of the imperfection of the cavity, according to others has the admission of air. I believe that both of those causes have considerable agency in the productiveness of inflamations. I mentioned that one advantage from bs. is to prevent disorganization from the secretion or effusion of coagulable lymph or pus. This direction is particularly important in diseases of the eyes where disorganization is irreparable. I go on to speak of Bs in other diseases. In all inflamations of the throat & fauces it is usefull in Cynanche Tonsillaris it prevents suppuration & schirrus if employed early. In Cynanche maligna the lancet is occasionally required but as a general rule it is not indicated in this disease. In Cynanche Trachealis its of immense importance & should never be neglected even in any young subject.

In a child less than one month old V.S is found difficult 10 or 15 leeches applied to the throat, first dipping them in warm water as they will do in jury by wide. Cynanche Parotidea, V.S. is indicated and the neglect of it has led to the swelling of the testicle of hernia humoralis. Of all the Phlegmasia pneumonia is said to require the most liberal use of the lancet. Dr Cullen's direction on this point is extremely valuable and to him I refer you, I have bled 5 times in one day in Pleurisy. The disease in this country requires the more free use of the lancet than in Europe, Frequently at the first bleeding your Patients will not bear the loss of more than VIII ℥ of blood without fainting, yet if you again apply the ligature in 2 hours he will bear the loss of XV ℥. You must be guided by the state of the system. You will find V.S. more usefull in the first day, yet be not deterred from it altogether for 4 days have elapsed may though a fortnight has passed without using the remedy, As for quantity no general rule can be given 16 ℥ being a full bleeding more are considered large, less than 12 ℥ is a small bleeding. Five pounds is generally as much as the Patient can bear to loose. The first four days, after which if pain become the urgent symptom use leeches

or cupping, but if you wish to relieve difficulty of breathing open the vein in the arm. Study Dr. Cullens directions in this disease. This practice is judicious. In other inflamatory diseases of the chest, not even excepting pulmonary consumption with muscular debility blood letting is proper in the latter however we apply leeches or cupping to the back.
Hepatitis, VS. is here the most important evacuant we possess. Even in odontalgia Dr. Rush recommends VS, Mr. Hudson our most respectable dentist advises leeches in tumefaction of the Gums.
Gout. Under certain circumstances, VS is the most important remedy, in many cases excruciating pain is relieved when balsams & opiates have been tried in vain. Dr. Rush done more service to the profession by enumerating the benefits arising from VS. in this disease. Eruptive diseases, Here it is useless for me to particularize the cases in which it is proper It is in almost all of them proper and you never should refrain from it by fear of debility for the disease is more debilitating than the evacuation. In these diseases VS has only the power of diminishing morbid action, not of changing it. —
Hemorrhagy which is accompanied with febril action is to be cured by VS. —

It might be supposed that hemorhagy would cure itself. but nature in such cases does not manage it judiciously. If hemorhagy is produced by local affections which is cured by Vs. we are to employ it. In Epistaxis it is often important. I am no advocate for Vs in every cases as it is apt to produce a frequent recurrence of the diseases. Hence other evacuations are to be preferred. Hemoptysis, here Vs must be employed so as to keep the action of the action of the heart and arteries below the healthy standard, During the discharge common salt, sugar of lead and other remedies are to be employed and the patient is to be kept up bed in a cool room. Hemorhoids local bleeding is necessary I generally make 6 or 8 small punctures with the lancet in preference to leeches. They should be made rapidly, so as to allow the discharge of blood, Menorrhagia Vs, is important. This is usually accompanied with febrile symptoms and we are to judge of the propriety of Vs by the state of the system. Hematemesis, In this case the pulse is not a good test of the utility of Vs. for the pulse is diminished in force and fullness owing to the powerfull sympathy which the stomach has with the heart and ateries, although we are not to be determined from the state of the pulse we must bleed unless the discharge is so great that we are

obliged to support the patients strength.
Apoplexy, the bloodletting is the remedy. The voluntary motions are destroyed while the action of the heart & arteries continues it is essential to evacuate largely & rapidly therefore I prefer bleeding my patients in an erect position. I sometimes open both arms. every thing retarding the motion of the blood from the head should be removed. In Palsy the cure is to be conducted on the same general principles always attending to the state of the system.

Lecture 12th. Nov. 28th. 1816

In many the spasms of Dr Cullen Tr — is an important remedy, it however ought never to be used in Tetanus, I state this with confidence having seen it employed in several cases and always with decided ill effects. In every case when I have seen Tr employed the patient has died. In hot weather and in hot climates this disease frequently results from wounds and on this account Tr in these cases is to be used cautiously. It is generally safe after wounds in hot weather. It ~~is generally safe after wounds in hot weather~~ to bleed as long as there is febrile action but I have seen in one case

in which Tetanus & death were the consequences.
In a violent fit hysteria I have known two quarts of blood taken away which produced an immediate cessation of the convulsions. In Epilepsy it is sometimes usefull but the remote causes are so various that we can give no particular matter of cure.
Chorea, with Sydenham & Rush V.S. was my favourite remedy, though Cullen feared evacuations, when we come to purgatives, I shall tell you that it bears evacuation, and is treated successfully by the use of purgatives; I have two general rules to give you relative to the use of this remedy:- Bleed in all cases of difficult respiration and for the relief of pain.- Bleed when the pulse indicates it.- In Cholic; V.S. is to be employed, it relieves pain, and prepares the system for other remedies.— In Bowel complaints the pulse seldom indicates V.S. and here it is to be employed in proportion to pain and the violence of the other symptoms.—
I have said enough respecting this remedy to show you its importance, and give you some general principles to guide you in the use of it.— Remember it is the most powerfull evacuant we possess.—
Having urged you to employ it in so bold a manner, I wish you also to remember that in using it,

the better part of valour is discretion.— If you follow the principles I have given you, you need not fear carrying the remedy too far— I know the remedy has been abused, and that in the hands of some ignorant men it has been injurious— but I also know many to have been cured by it of violent malignant fever, and impute to it their decease, or its lingering effects.—

Of the use of V.S. in Surgery, you will have some remarks from the Professor of that chair; and also the manner of performing the operation— Much has been said respecting the proper place of opening veins— those of the arm are most convenient, and serve every purpose with opening the jugular vein, or carotid artery— The latter operation ought never to be performed.—

18th

In hepatitis &c our practice is by bleeding to diminish the existing morbid action upon which the disease depends. There is only one of the Phegmasiæ in which bloodletting has been considered as a doubtful remedy and this is Gout — but here as in every case we are to be directed by the state of the System I have found much benefit from the use of it both in regular and atonic Gout and by it have diminished pain when Laudanum &c had entirely failed (See Dr. Rush on Bloodletting in this disease; Medical Observations & enquiries) Among the Eruptive Complaints there is not one in which bleeding is not proper. We are to remember however that bleeding in these cases only diminishes action not altering the specific nature of the disease. In hemorhagy bleeding is not proper in those cases which have been called active or where febrile action prevails. — The patient should be kept in a cool room but the surface of the Body should be kept warm not hot. In hemorhoids, (especially scarifications & Leeches) Menorhagia Hemetimisis &c Bleeding is proper. In Apoplexia bleeding as a remedy is the "sine qua non" from whatever cause proceeding it is to be promptly and boldly employd to such an extent as to cure the disease. It has supposed that the Brain may be more readily emptyd by opening the Temporal Artery but I do not believe that it is of any more advantage. In Palsy bleeding is also proper the" disease proceeding from the same cause as the apoplexia in a lesser degree. In Spasmodic diseases is of very valuable in some it is decidedly prejudicial — it is not to be employd in tetanus (In every case in which I have seen it employd I've found Death invariable occur) In Wounds occurring in warm weather therefore as already observd I bleed more sparingly than the case would

Would apparently warrant but it is to be observed that if there be considerable fever present bleeding is not to be ~~considered~~ omitted. In convulsions & violent muscular affections from hysteria Bleeding is of Importance. The powerful effects of Bleeding in removing muscular affections is most powerfully illustrated by their efficacy in removing the difficulty of reducing Dislocations when the muscular power has resisted the force of Considerable Mechanical strength. In Colic Bleeding is often essential it relaxes spasms prevents Inflamation & Inflammatory colic Vs or cupping is powerfully relieving pain In Bowel Complaints the pulse is not a proper guide in them we are to be directed by the Violence & Continuance of the pain remember that you are to consider Bleeding as your most potent remedy in the treatment of disease, but remember also that here discretion is the better part of valor. It no doubt has been misused by Ignorant & rash practitioners — like other Medicines the prejudices of many people are against the use of it. You will find in Coopers Surgical Dictionary my opinions on the means of performing the Operation which are in favor of the Spring Lancet. Much has been written on the proper place for the Operation it is in general performed in the Arm In fat Children the Saphena where it crosses the Internal ankle may be opened with advantage as also the Jugular vein Opening an Artery is not in general proper —

20th "

November 27th "

Of Local Bloodletting

Scarification is in general used in cases of local inflamation as in Opthalmia in this Instance with the shoulder of a Lancet or with a Scalpel the Inflamed Vessels are to be opened in many cases the best effect arise from Scarifications Perhaps when the ~~emptied~~ vessels emptied may contract and the adhesive action used to heal the Incision is probably a New action. Cupping the ancients were much in the habit of using cups — Celsus describes the operation for many Centuries it has and still continues to be a favorite operation in topical Inflamation — it should not be used untill the Vessels are to be emptied by general Bleeding They are useful not only in Local Inflamation but to draw blood very slowly when general Bleeding would produce fainting & dangerous symptoms, Celsus says cupping is to be used in diseases when general bleeding weakens too much In case of Local without apparent disease cupping is useful In cases of an equivocal as in Typhus Pneumonica cupping is proper they should be put on the Back or parietes of the Thorax In this disease I never saw cupping do harm Leeches have been long used in other countries and have now been added to the list of our remedies — They are mentioned by Pliny. They are of Immense importance in cases of local inflamation they act in the same manner as cups have advantages over them In the case of wounds or contusion of the Joints or Limbs cups from the pain they produce cannot be born now in these cases leeches to may be applied much

nearer the part than the cupping in many cases as in Ophthalmia, Inflamation of the Gums &c In addition to this cupping is more painful and leaves greater scars. The British Surgeons direct leeches in a ridiculous manner prescribing one leech in cases of Ophthalmia where we would use a Dozen Their is as little adapted to the cure of our diseases as Dutch foot stoves are to the frozen Zone Leeches are sometimes employd in cases of young Children. Prejudice exists against bleeding in young children and many die in consequence of it from my own experience Children recover after accidents that would have destroyd adults, they been the Active remedies except in cases of Salivation which Induces Sloughing of the Gums &c From this view of the Tenacity for life in Children I call upon you to bleed them as freely as possible in proportion as you would adults In Croup of Children bleeding is our only remedy In Infantile Pulmonary complaints bleeding is to be copiously employd The same is the case in Hydrocephalus in Convulsions We must bleed and that frequently.

Of Emetics

Emetics are such remedies as invert the peristaltic motion of the Oesophagus and Stomach & discharge the Contents of the latter The earliest records of Medicine contain accounts of the employment of Emetics prejudices have existed against these Medicines they have been said to be unnatural remedies In health this it is true is the case

case but in a diseased state of the stomach they are natural means of getting rid of the offending matter, as much so as the winking the Eye is natural when we see a blow aimed at it. That Emetics are not dangerous remedies the daily experience of the world proves sufficiently. The Physiology of vomiting has been clearly made out. The Stomach was formerly supposed to be perfectly inert the effect being produced by the action of the Diaphragm & Abdominal muscles This however is fully disproved by the fact that we use those agents without ever Inducing Nausea. But Dr. Haighton opened the abdomen of a dog during vomiting and saw the Stomach in action again in some persons after one Vomiting the disgust is so great that the Oesophagus contracts on again presenting the Mde and denies it admittance. The frequent Bringing up of food from the stomach without any effort of the abdominal muscles is also another proof of the action of the Stomach in vomiting The Inversion of the motion of the Stomach is continued to the duodenum, The Action of the abdominal muscles naturally empties the bile into the duodenum and from thence it passes during vomiting into the Stomach. That the bile thrown up in vomiting did not preexist in the Stomach is proved by the fact that the first Matter thrown off is free from it. Dr Darwin Theory of Vomiting being produced by diseased action of the Stomach is disproved by many facts. There are many states of the system in which vomiting takes place and this may either be ~~made~~ a state of weakness as after bleeding - Opium &c or after excitements as emetics. After administering an emetic

in a proper dose for 10, 15, or 20 minutes the Stomach remains easy then a sense of uneasiness and nausea comes on and Increases until vomiting commences while the nausea only is present the face is pale the pulse quick, feeble & Irregular and there is a sense of cold but when the Vomiting commences the face is flush'd the pulse quickned though still feeble the Vomiting recurs twice or thrice and then ceases a degree of nausea remains for a short time the pulse becomes full but is weak and slow there is a degree of Languor and a Disposition to sleep & a moist Skin. Vomits acts differently in different Constitutions in some it is easy in others it is attended with dangerous symptoms as spasms hemorhage. Boorhave relates a case of Death from an Emetic taken by a Dutch glutton to whet his appetite before a Feast In fevers especially when billious symptoms predominate vomiting is easily produc'd whereas in Mania the action ~~the actions~~ of Emetics as well as that of all other Medicines is difficult of being procured. In Tetanus &c large doses of ~~Opium or~~ Emetics are required to excite an effect this is likewise the case after taking large doses of Opium or other poisons as Arsenic &c. Dr Murray observes that the nauseating effects of the different Emetics are very Diversified a circumstance which is to be attended to in the Administration of Meds. The effects of Emetics upon the general system are to be referred to the sympathy existing between the Stomach & heart, skin kidneys, head &c it has been remarked by Murray that Emetics if they fail of Vomiting in doses purging but though true of Tartrite of Antm

24th

I do not know if it be a universal occurrence, Some advocates of Emetics recommend their Occasional use in in health vide Cullen, on this subject common sense is the best guide Medicines in health are always improper if not dangerous. The use of Emetics in Fever has been highly extolled by my two last predecessors in this Chair and I most fully concur with them in their Opinions of their good effects. In Billious remittent & Intermittents they are Indicated by the state of the Stomach they are here particularly useful in Warm Climates If Febrile Symptoms run high bleeding should be premised Boerhaave very properly directs emetics to be anticipated by Bleeding in every case when plethora and an Emetic is to be required. Their Operation is much more beneficial he observes after Bl. I think this is a most Valuable direction. Dr. Cullens observations on the employment of Emetics in fever are very correct see First lines. In Intermittent Fevers accompanied by a phlogistic diathesis Bleeding should be first employd then Emetics, Cathartics but in Mild Cases when the pulse does not Indicate bleeding Emetics are highly beneficial in the first Instance as precursors to the use of Tonics The best time for employing emetics in this disease is Immediately before the expected paroxisms. Dr. Fordyce directs a combination in Intermittent of Part. Emetic and Specac because he says this Induces besides emetic effect diaphoresis and purging which imitates the Natural Crisis. In a former part of the course I told Upon the face became flush'd during Vomiting hence is derived a practical direction not to use emetics in diseases of the Head — Sydenham directs in these cases not to lay aside the use of the Emetics but to premise bleeding

In Epilepsy emetics are beneficial Pothergill gave them in Apoplexy where it is to be derived from the Stomach they may be used but blood must first be drawn. I never saw true Apoplexy derived from the Stomach in any way in which Emetics were proper, a case occurd to me in which a patient who had the pain & vomiting was produced in consequence of some offending matter taken into the Stomach during the action of the Stomach a Vessel was ruptured in the crania Emetics are however invaluable in cases of spurious Apoplexy from Indigestion or from overloaded Stomach this only resembles Apoplexy – it differs from it 1st in its cause 2d In the Absence of Stertor in Breathing 3d By a low small & frequent pulse 4th by distention of the Stomach and bowels being perceived upon examination – here Emetics must be used in conjunction with partial Bleeding & remove all Costiveness from the Vessels of the Neck. In Hydrocephalus Internus Emetics are very doubtful remedies when used out of Excitement Absorption – Small doses in protracted cases are however very beneficial Dr. Chapmans theory of this disease is erroneous – In the phlegmasia general small doses of Emetics are sometimes proper. In Remittent Gout Dr. Barton directs their Employment – Dr. Chapman abs. This form of Gout is seldom met with in this City – In common Rheumatism they are not so good as small doses of Emetics which produces Diaphoresis. – Dr. Barton conceives in Gout Emetics are most proper where it induces Vertigo &c Others only direct them when very pressing symptoms requiring their Operation are present.

In Atonic Gout I think them improper In Chronic Opthalmia emetics not have been found beneficial I believe when you manage this disease by bleeding and other Evacuants in its commencement emetics will be useless. In all the discases of the Throat emetics are very beneficial — to instead Abscess of the Tonsils or Throat Emetics are barbarous remedies. In Croup they are in the highest degree useful they appear to arrest very speedily the dangerous termination of this disease When called in the Night to Children who you suspect to be attack'd by this disease. Never fail to carry with you your Lancet and Emetic Tartar. the relief here from an Emetic is often very sudden In acute diseases we must if we wish a favourable result commence with the most active remedies but this is the case in the present disease. Emetics have been supposed in this disease to evacuate the Membrane Practitioners supposing all the Symptoms to depend upon Mechanical Irritation of this Effect of the disease. I conceive the Spasmodic contraction of the Glottis &c to produce the difficulty of Breathing and other Symptoms I once commenced the Operation for Opening the Larynx in a case of the Croup the pain & fright produced an Instantaneous relief of the Symptoms doubtless by relaxing the Spasm. Emetics are beneficial in Pulmonary Complaints Small doses here act as an Expectorant and Diaphoretics — In Asthma and Catarrhal affections they are very beneficial — A Physician in the South wrote to me that he had discovered a Specific for the Catarrh in Emetics and in the Commencement. In consumption they are often employed but when weakness present they are improper

In Mania I have kept up a continual Nausea for weeks and have found benefit arrise from the practice the Depating effects of Emetics are in combination with bleeding highly important as a means of rendering restraint more easy in this disease In Mania a Potu - Dr. Klapp has in the City almshouse us'd Emetics - to produce their effect he has found Large doses as ℥j or ℥ss Tart. Emetic requisite Dr. Klapp states that when from Debility present you would not use other Depletents he found the pulse raise under the Operation of Emetics That there must be varieties of Constitution in Mania a potu I have not the least doubt and where there is a Strength enough to bear the Emetic - use it - but not when the Weakness is present - By Dr. Physicks advice I us'd Nauseating doses of Emetics in Case of Tetanus in a Child arising from a Wound - The Patient recover'd - but I should Tremble to resort to this practice only. In Instances of Obstinate Muscular contraction after Dislocation and Hernies when from present Circumstances bleeding is not advisable nauseating doses of Emetics may be Employ'd When any body as a Peach Stone is Spasmodically retained in the Oesophagus a Solution of Emetic Tartar held in the mouth though not be swallowed will relieve the Spasm and allow it to be removed - Two cases of the kind Occurr'd when I experienced benefit from the remedy - On the same principles probably it is that Emetics are useful in accelerating the passage of Gall stones in the Jaundice and urinary Calculi through the Ureters - There are many affections of the head in which

Emetics are of decided benefit as in sick head ache Dr. Barton in these cases prefered Ipecacuanha from its mildness and the continuance of its operation. In pain of the Head from injuries of that part unaccompanied by fracture or Wound Dr. Physick has found no remedy so beneficial as Emetics repeated daily for a short time then at longer intervals — In puerperal Fevers emetics have of late been recommended in this as in all other diseases of the peritoneum great danger is to be apprehended I do not think that Emetics have any specific effect here but Where they are Indicated they should be used — Puerperal fever in its advanced stages is accompanied by a black vomit and closely resembles Yellow Fever. Emetics in this disease are to be employed according to the directions under Billious Fevers. In hemorhagy they were first used By Bryan Robinson then by Cullen (see first Lines) I never use Emetics in Hemptyses but small doses are of benefit. In Uterine hemorhagy emetics have been used in Europe. I have repeated the practice with some benefit. In Bloody urine emetics have been used with benefit Dr. Barton Employed Ipecac. in combination with Opium in this form it did not produce Vomiting Sometimes all tho" benefit was derived from the Opium. In Hernia Humoralis they are in combination with bloodletting this latter remedy should not be neglected Obstinate Buboes have been Discussed by emetics but here a blister is the greatest remedy They have been Employed in Dropsy That emetics promote Absorption there is no doubt but there is less reason to

Believe them capable of absorbing water than pus
When used in small doses the theory of their operation is much
more easily made out. In cases of Anasarca from Intermittents
Emetics in combination with Mercury are very beneficial
In hydrocele I apprehend no benefit from these or any other
Mode given by the Mouth. In acute inflamations however
of this organs the case is altered tho" the parts are here very
susceptible of Impressions made on the Abdominal viscera
In Hydrothorax emetics should have been employed.
Sydenham recommends Emetics in Ascites, Fitcher
recommends them in Diabetes. In dysentery emetics
have been recommended but I conceive that the disease
should be treated precisely as every other febrile disease
whenever emetics are indicated by nausea & they should
be given. In Diarhoea emetics are proper in those cases
especially where it has arisen from a Foul Stomach
and also where it comes on in a catarrhal kind in all
these latter cases small doses of Emetics are to be employ
in conjunction with flannel next the skin. From a remark
allready made you will readily believe that emetics are
proper in Dispeptic cases Dr. Fothergill employed them
in this disease. In Rickets emetics have been used, that emetics
must be proper in this disease I believe becaus the disease
is often connected with obstruction of the viscera, but after
the digestion is becomes regular tonics cold bath especially
sea Bathing and steel are the proper remedies. This disease
is seldom met with in this country. In Fluor Albus
and Chlorosis emetics have been employed.

Of Tic Doloreux. The first case of this disease on record was cured by Hemlock. – Pothergills account read before the London Medl. Society contains the first accurate account of the disease – From Imperceptible beginings the disease arises to a degree the most alarming – it attacks the parts about the orbit side of the face &c. The pain comes on suddenly and is very excruciating but goes off in half an hour – the kind of pain attending it is differently described in different persons It returns as often in day as in the night and is excited by the slightest touch or motion while the strongest pressure does not excite pain. It differs from any rheumatic affection of face in its occurrence not being regular – The tooth Ache seldom ceases until the tooth is extracted whereas the Tic Doloreux is not present unless excited by some slight touch or motion of the part The cause of the disease is unknown: within a few years many case have occured and many cures have been recommended as bicuta, actual Caustic. Mora &c. Hayton succeed in removing it by cutting the Infra orbitary Nerve but the disease returned In other cases there was an abatement of the symptoms Abernethy cut out a portion of the Nerve which had the effect of blunting the pain. Dr. Physick has tried emetics in this disease with success one Patient has remained free from pain ten Years. In the class of Eruption emetics have been used in all diseases of this kind accompanied with Febrile symptoms they act on the same principals as in all other

Febile disease, but there are other diseases of this class which depend on disorder or Idiosyncrasis whose Emetics are the principal remedies. Mode of Administering Emetics. Instances occur where poisonous substances in the stomach requires instantaneous discharge Emetics should be given in large doses at a time. On the contrary in many chronic diseases emetics are to be continued daily for sometime Emetics should never be given in an advanced state of pregnancy and they are generally improper during Menstruation. Persons afflicted with hernia should be cautious in the use of them whenever plethora is present Ol is to be premised The activity of the Emetic is to be regulated by giving the Mac in divided doses when violent symptoms from an overdose cordial drinks - opiums, blisters and sinapisms are the remedies. Warm Water, herb Tea drank after an emetic renders its operation more easy - we should remember to direct our patients not drink before the Emetic effects come on and then they should drink after every action, remembering ~~after~~ that large portions are better than frequent sippings. Drinking after emetics is less necessary in children than in adults. If a violent emetic operation is required no drink is to be given. We are next to consider the Individual emetics: the divisions and subdivisions of these, by former writers on the Materia Medica, are perfectly Useless - Among the most lenient emetics ~~most~~ writers have enumerated warm water (tepid) impregnated with Nauseating substances, Irritating the Fauces &c &c - — —

Vegitable Emetics Ipecacuanha — Calicocca Ipecacuanha of the botanist This is a native of Peru. There are two sorts imported, a brown and an ash colour, the last of which is the most active — Cullen supposed the active properties of the plant to be the resin and to reside in the Bark, hence he and Dr. Lewis who is nearly of the same opinion direct as a menstruum for the Ipecacuana equal parts of Alcohol and water — but wine is a very good menstruum. Cullen and others who supposed the active properties to reside entirely in the Bark are mistaken — The wood is active in the proportions of two parts to one of the Bark The Ipecac. is most commonly exhibited in substance. Its medicinal properties are volatile and hence we should never give the Mde in Decoction. The quantity necessary to Vomit varies in Different persons, some are effected by a single grain, whilst in South America we can told the Inhabitants require from 30 to 60 grains. The Medium dose I direct is from 15 to 20 grains; I have never heard of any bad effect from an overdose: when we wish to augment its effect, we should add to it Emetic Tartar. with respect to the doses of Emetics Dr Fordyce says where emetic effects are required, the dose is not of much consequence and it is thrown up by the first effort, but this is not in every instance correct. the Violent effects of a large dose of an emetic continues after the emetic is thrown up from the Stomach. The cases of diseases, to which Ipecac is adapted, are numerous; it is not to be employed in those cases where a Violent operation is to be required its operation is mild and is frequently accompanied with increased peristaltic motion of the Intestines.

That however its good effects in bowel complaints do not result from this circumstance is evident though referred it. The Ipecac has been employ'd in Dysentery; possibly as suggested by Mosely it may in this disease by producing diaphoresis. Murray considers Ipeca to be an antispasmodic also Others as an astringent Dr Chapman as a sedative or as a means of lessening the force of the circulation. By giving 2 or 3 grains at a time or at intervals of 3 or 4 hours, we will gain all its effects. Dr. Barton us'd it in Dysentery both acute & chronic: have us'd it in combination with chalk & Opium beneficially. It is useful in Diarrhoea especially in that species from irritation in the stomach, for 2 grains are to be given before rising and an anodyne at night. In hemorhagy from the Lungs small doses to keep up a continued effect are useful, as also in uterine hemorhagy it should be given in combination with Opii or sach Sat. the effects of which latter it augments — — — — ℞ Sach Sat 3ss 4gr

To be taken every hour or every second or — Gum Opii gr 1

every third hour — — — — — — Pulvis Ipecac 1gr

In fever it is employ'd and in small doses combined with Nitre act as a Dia-phoretic. In Intermittent fevers for its employments see Cullen. In consumption it has been found of benefit Dr. Rush and Dr. Barton employ'd it in this disease in nauseating doses with benefit. The latter gave it in combination with chalk I should prefer giving it with Nitre. In dyspepsia doses ~~from~~ of a grain in combination with other remedies the Ipecac is beneficial. Akenside has recommended it in Asthma. The relief obtained is not supposed to result from its emetic operation, its use here is sanctioned.

by repeated experience of its use as a remedy in Dropsy I have no experience except in Hydrothorax where I found it to diminish the difficulty of Breathing. In Ascites it has been employed under the form of Dovers Powders. In cases of Poisons from 1 scruple to half an oz should be given. According to Dr. Lewis the Ipecac Increases the Operation of Jalap as a purge.

Spirea Trifoliata, Indigenious, The Emetic powder resides in the cortical part – it has a near resemblance to Ipecac – Dose 30 or 40 gr. The size of the dose is a great objection. When Ipecac can be procured it deserves the preference. Tobacco, Nicotiana Tobacum – of the Botanists this plant is emetic in the highest degree, it is also narcotic, Diuretic &c. Dr. Cullen objected to it on account of its harshness. As having no qualities preferable to other emetics it is seldom employed. in small doses it has been used in Maniacal cases but I doubt its efficacy in many of these cases. my two last predecessors recommend it in cases of poison but I think here the system is too prostrate to warrant it the best method of using tobacco is in the form of a cataplasm.

Squill. Scilla maritima, native of Spain, nauseous, bitter, & acid taste it irritates the skin when much handled, here the Turks employ the fresh squill under nearly the same circumstances as we employ frequently the Onion externally. Its active properties are fixed and the dry specimen is more active than the fresh. it may be employ in Decoction or in substance &c &c. it has been given in Consumption and asthma as an expectorant and in Hydrothorax as a diuretic it seldom used as an emetic. The Dose is from 4 to 8 grains.

Mineral Emetics Antimony found in Germany, Hungary, France and England. The most ancient history of this Article speaks of the use of it as an Eye water and to stain the skin of the Eyebrow & Lids Black — No individual article has varied so much in its character among medical men in different ages as this. There was a time when all science slumbered from this Coma it was roused by the chemical world whose crucibles were never empty their fire never extinguished Every Mineral was tortured by them for the Fallacious hope of finding the Philosopher's Stone. This Examination into Nature introduced into Mec. many articles more valuable than the Gold which they were in search of — among them was Antimony — the regulus was not perfectly inert for when taken into the stomach it produces emetic effects without appearing to lose much of its substance witness the perpetual pill — there is no Instance of an Article served up in so many forms as this —

Tartar Emetic Tartras Ant. et pot.: It is made by boiling together Oxyd. ant. per Vitras potasse & super tartras potasse in Water it powerfully Emetic Dose from 2 to 5 gr it is generally given in divided doses

℞ Ant. Tart 5 gr
Aqua commune 5 spoon

One spoonful to be given every 15 minutes — till it operates

To Children from 2 weeks to 2 months old

℞ Ant. Tart 2 gr
Aqua 16 spoonfuls

A Tea spoonful every 15 minutes —

To a child one year old 1/4 gr after 4 years of age 1/2 a gr

The doses I have mentioned in ~~in~~ severe cases are to be augmented remembering to give it in divided doses.

B 6th

The Wine of Antimony is more generally employed in diseases of Children; According to the London dispensatory the Antimonial Wine is made by dissolving Tartar Emetic ℈ij in Aqua bullient ℥ij and adding wine ℔ viij. I prefer the watery solution - the wine may be given to Children (very young) measuring the doses according to my former remarks. In cases of croup the watery solution is in every Instance to be preferred. The dose of the wine according to the London Dispensatory is ℥ss to Edinborough ℥i Emetic Tartar when given in a proper dose is the most certain of Emetics it afterwards acts as a Cathartic and Diaphoretic & sometimes as an expectorant. the Emetic Tartar is extensively employed In Intermittent, remittent & continued Fevers. From its Cathartic and Emetic effects it was supposed to do good in these diseases. Tis not unusual says Fordyce for a patient in Remittent fever after the action of Emetics to fall a sleep and a complete crisis follow But it sometimes does good without either acting as an Emetic or a Cathartic - By Inducing Diaphoresis & indirectly acting on the Heart & Arteries. Cullen supposes them to act in this disease best when it causes nausea. Fordyce says if Antimony produces vomiting or considerable nausea then effect is counteracted - This is an error Dr. Hugh declares the benefit from Tartar Emetic the most striking when administered in Divided Doses to occasion nausea In the Phlegmasia the use of Tartar Emetic has long been considered as a very important remedy -

It is only usd however in combination with other remedies and is generally given in combination with Nitre. In Hemorhagy it is pretty extensively employd in those cases accompanied with Febile symptoms In common cases of hemorhagy Ipecac. is to be preferd In Small Pox and in other eruptive diseases Emetic Tartar is given to vomit when Eruption is tardy and in small doses during the Febile stage. There are various Eruptions depending on Indigestion in which Tartar Emetic is the proper Vomit The most common of these is Urticaria not the Urticaria of Willan it seems from Eating various articles to which the stomach is not accustomd. In Lepry & Venereal diseases the emetic Tartar is totally useless. Dr. Willan recomends the Long use of Antimony in Chronic Eruptions I think the Mercury a much better remedy. The topical use of Tart. Antimony to Chronic Eruptions Dr. Hoffman says he has found of benefit Sir John Pringle & Baker speak highly of the use of Emetic Tartar in Dysentery as this is a febile disease it should be treated as one In this disease I think Ipecac. is best I told you that in ~~Antimony~~ many cases of fibrous contractions small doses of Emetics were proper Emetic Tartar is the best for this purpose This is also one of the Emetic used when poisons have been taken it may be given by the Mouth or in Enemata —

It is in this form destitute ~~from~~ of the depressing effects of Tobacco and is said to vomit. I have however used it without the least effect. Dr. Chapman is the first that employed it in this manner. He has also used it in cases of Obstructed Bowels he directs 8 gr in solution every 15 or 20 minutes. he likewise employed it in Idiopathic Pleurisies Tartar Emetic forms useful irritant when externally applied and may be employed in many Pulmonary Cases when blisters are Inconvenient — It is applied by sprinkling the powder of Emetic Tartar. In chronic pains of the chest I have used this remedy with benefit. The Tartar Emetic is almost the only mineral emetic employed in England and America but there are others which are used on the continent of Europe especially in France — As the Hermis Mineral dose 1 gr to 1½ grains Golden Sulphuret of Antimony differs but little from the former

berated glass of Antimony has no advantage over the Emetic Tartar and is frequently a dangerous remedy — Sulphas Zinci. This powerful Emetic in doses from 10 to 15 gr. It is prompt operating speedily peculiarly adapted to cases where poisons especially Narcotics have been taken it should in these cases be taken in large doses ℥ss to ℥i — Cullen objects to it from the largeness of its doses and long continued doses on account of its Nausea that it induces — These objections are not however of much weight — A teaspoonful of mustard taken after the Zinc Increases its effect Mosely with whom this Medc is a great favorite, says it never induces spasm of the stomach or irritation which are apt to follow other Emetics. Except in cases of poisons I know nothing to say in its favor over other Emetics It has been employed in some Cases of Pertussis with benefit In croup I prefer the Emetic Tartar decidedly — Dr Mosely directs the Medc to be employed in the following manner — ℞ Sulphas Zinci ℥iij
Acetat Cupri
℥ss per dose
Aqua Aluin ℥i
Aqua Bullient lbj

I am no advocate for this Solution in Dysentery or Diarhoea as recommended by Mosely who ascribes to it many virtues he says when Employed in Colica Pictonum after the costiveness is subdued he never found Colicy to recur. In most of the cases in which this Medc was employed by Mosely I conclude the Antimony and Squill are preferable

Sulphas Cupri. This article proves a prompt and powerful emetic Dr. Hartshorn has employed it in the dose of ℈j when large doses of Opium have been taken and speaks highly in its favor the average dose is from 2. to 5 grains I have known 1/2 gr prove an Emetic: Simmons (of London) employed it in preference to all other Emetics in pulmonary complaints Dr. Lentin speaks also in its favor he gave it in combination with Specac Dr. Cullen is not favorable to the use of the Copper I declare it to be an unmanageable emetic as it occasions less relaxation than other Emetics it has been employed in cases of Consumption with debility Several Mercurial Salts are Emetics Corrosive Sublimate Dr. Barton has recommended this med. in croup but it is a harsh and dangerous article. Turpith Mineral - Sub Sulphas Merc. This article acts as an emetic in the dose from 3 to 5 gr - It has also been employed as a Sialagogue see Dr Cullen whose remarks on Mercurial Emetics I fully coincide in - In Hernia Humoralis it has been supposed to be well adapted because it produces both Emetics and Sialagogue ~~the Calomel has much better~~ effect - but as an Emetic the Tartar Emetic and as a Sialagogue the Calomel is much better.

In concluding the article Emetics I have to remark that the list has been swelled far beyond the size I have presented to you but I conceive that whoever expunges from the Materia Medica an inert article will become as great a benefactor to society as he who adds a new one

Cathartics.

The term Cathartic is exclusively employed to denote such articles as empty the Intestine they have been called natural remedies because they merely increase the natural evacuations They are very ancient remedies No nation however rude, but are acquainted with their use. Amongst the Various Modes of Exciting the Action of the Intestine some Difference is to be observed One portion as Cold, fear &c act by exciting the Muscular Action of the Intestines — Another as the Stimulating purgatives by Increasing the secretions poured into the Intestines Others by exciting Both Actions. I shall treat of them all under the heads of Laxatives & Cathartics — Observing that most of the active ~~remedy~~ members of the class may be so managed as to produce merely cathartic effects. The effect of cathartic taken into the Stomach during a healthy state first Stimulates that organ & causes generally a greater or less degree of Nausea the Stomach evacuates its contents into the duodenum this in its turn contracts — the gall Bladder &c are excited into Action and pour their Contents into the Intestines there is also a more profuse secretion of the mucous of the Intestines — The Stimulous is gradually communicated throughout the tract of the Intestines and an Increased peristaltic motion takes place. Griping sometimes attends — The Increased secretion of mucus empties the Blood vessels and hence Cathartic are among our best and most powerful depleting Means

Cullen is therefore wrong in supposing them not very powerful in removing the phlogistic diathesis of the System. Besides the effects of Cathartics on the Intestines & on the Heart & arteries they also act on the Absorbents all the functions of these vessels are Increas by Cathartics whether they produce this effect by emptying the Bloodvessels or by sympathy is not very Important to Determine — Purgatives like other active Medes produce in the system new Action and although purging may not suspend Morbid Action in the system they at least weaken it and assists in its removal - Although During a healthy state of the Body cathartic reduces the pulse and cool the skin yet in apoplexy by removing the disease they Increase both. They frequently Induce sleep when opiates have faild to operate — Purging relieves the Head Lungs and skin which is to be explaind by the fact that no two Actions can exist in the system at once. Although a general state of health is not Consistent with Costiveness yet the effects of Habit is such that many have not a stool more frequently than every ~~other~~ the day Dr. Physick has a patient who is uneasy if he has one more frequently. Haller cites Instances of persons passing from 5 up to 45 Days without a stool Others where several Years have passed and Moved only 2 or 3 times in a year. B — a patient had but 3 or 4 stool pr year for 15 Weeks previous to his Death he had no evacuation his Appetite was as usual until his Death pulse but little

little attend he frequently belched up wind
respiration as usual, belly swelled every means that
Ingenuity could Devise were employd without effect
On Dissection it was found that there existed a stricture
at the lower end of the Colon the Muscular fibres of the
Intestines were increas'd in size there was very little ~~the~~
other disease. As the stricture in this and in an
analogous case were low down in in the colon - would
not a puncture in the colon to form an Artificial anus
to prevent inevitable death be Proper? In Milder cases
we have many resources by which the Patient may be relieved.
Even in Intosuscepto and hernia nature endeavors to
to overcome the disease. In the First Case by connecting by
adhesions the Intosusceptd portion permitting it to slough
and be evacuated by stool. In the latter by forming an
Artificial Anus by Mortification. Constipation by
long continued occasions. Headache, Nausea, vomiting,
loss of Appetite Vertigo &c. Dr Physick has a patient who
looses his sight when costive and regains it on emptying
his Bowels, Costiveness also causes piles. It depends upon
several causes upon weakness of the Muscular fibres of the
Intestines hence women are Costive Ceteris paribus, than men
Cullen mentions as another cause rigidity of the Muscular
Coat of the Intestines - however opposite of the above causes
may be I believe them both to be correct - how far a
decreased secretion of the Bile may Influence the action
of

of the Intestinal canal we are not fully acquainted that it does in some manner is very probable. Much mechanical Obstruction is another source of Constipation. Purges are the remedies for this disease but frequently after sometime the Intestine refuse to act any longer under the same cathartic Those Articles of the Nutrientica laxative in their Nature are to be tried first to relieve costiveness when arising from billiary Diseases Mercurial Purges are to be employed and in cases where purgatives fail a salivation is to be resorted to. In most cases of colic purgatives are to be employed In some cases of colic accompanied with all the symptoms of constipation Nausea Vomiting &c The warm bath & Laudanum free Enema are also to be employed. In Colica pictonum cathartics are proper Pemberton directs Castor Oil and Laudanum I treat such cases by Laudanum and cathartics In fevers Cathartics are among the most efficient remedyes. The peristaltic motion of the Intestine being depressed by the Fever the contents are detained & and agravate all the symptoms hence the necessity of keeping the Bowels regularly open - Continued fevers seldom occur without local determination hence in all these complaints the necessity of Cathartics In Intermittents they are Indicated but are not to supersede emetics. In Billious and Yellow Fever I believe there is always an Inflamation of the stomach active purgatives are to be employed the hydrogogue purgatives are the ones made use of.

In Typhus Fever Hamilton employs in Cathartics as remedies well adapted to the disease I have no doubt of the correctness of his remarks. The extent to which they may be used in typhus is greater than was supposed before his work appeared. they are to be carried as far as fairly to evacuate the Bowels Dr. Barton directed this treatment many years ago. We are to be directed however by existing Circumstances and the states of the ~~systems~~. In various eruptive diseases Cathartics are of primary Importance In Erysipelatous they are of Importance and require to be actively employed. In scarlatina which frequently occurs as an epidemic under various states of the system I have seen many cases and in this City purges were always largely indicated. In a Majority of cases costiveness is present The Oedematous state of the limbs which is apt to follow scarlatina is prevented by purging during the disease. In Measles gentle laxative are always proper and prevent any pulmonary affections from following in this disease bloody stools sometimes occur these do not contra indicate purging and are to be cured by small V.S. In the remedies for local Inflamations cathartics hold a high station In Ophthalmia especially long continued Bleeding and purging on alternate days is the proper treatment Morbus Coxarius - this disease is to be treated on general principles but in spite of the remedies for common Inflamation it runs on to suppuration &c

Dr. Physick found this termination in every instance prevented by long continued purging rests & splints &c The patient instead of sinking gradually under the treatment of acute and chronic rheumatism purges for many time of the most prominent features.

Gout has been supposed a modification of Rheumatism but the two diseases differ in their causes seat & symptoms and in the constitution affected. The most ancient Physicians reccommended purging in Gout but it was afterwards laid aside. The regular Gout of the ancients was supposed to be a sacred Disease and was not to be meddled with. Cullen was much supposed to believe that Gout was incurable by Medc but that much might be done by ~~Diet~~. Purges have been too much neglected. I agree with Dr Cullen that Gout is cured by supporting the tone of the stomach and hence it becomes necessary to obviate costiveness. In regular Gout purgatives are proper remedies. In retrocedent gout they are to be employed cautiously they have caused an attack of gout in the stomach. The symptoms that indicate an approach of an attack are sometimes well defined here we may frequently use cathartics with advantage. In regular Gout ~~&c~~ is better as a preventative. When the disease is fully formed with great fever swelled foot and if the patient is not accustomed to a retrocedent purgatives are proper. They have been used latterly to a great

Extent

My only fear is that the Misuse of a good remedy may destroy its character – I ought to Believe with Dr Pitt that Gout is not a sacred Disease but must with all other be treated according to the state of the system. Many Specifics have been brought forward they have all given way to the Vau medicinale Dr Pearson it is a powerful Medy and has sometimes Done good – it was discovered about 1770. Its taste is nauseous & Bitter smell vinous and is the colour of ale It was Introduced into England in 1808 When given in the paroxysms of Gout it diminishes pain if given in the Night it throws the patient into a sleep he awakes in the Morning much freed from pain and has a copious Billious Stool After a few day he finds himself in every respect well For sometime past it has seldom been employd – In some cases it has faild and in others produced the most fatal effects my own Experience of the Medy is but little but that is in its favor Many Attempts have been made to discover the Composition of the Medy the Elaterium by some has been supposd to enter into its Composition – The root of the Colchicum Autumnale in Tincture Mr Want of London has declard to resemble in its effects the Vau Medicinale. In all local inflamations purgs are valuable Remedies. In Tonsillaries and other affection of the Throat they have unjustly supposd not so well adapted In Pleurisy &c we purge with advantage

In many cases of Consumption are of use In Apoplexy
purges are beneficial Assistants to V.S they act by
emptying the Bloodvessels by exciting a Counter Irritat
and by exciting the Action of the Brain. Hydro-
cephalus in the Commencement consists in an
Inflamation of the Brain and afterwards in an
effusion of water in the Ventricles. Purgatives are
well adapted to both Stages of the disease in conjunction
with the early use of the Lancet and other remedies
they must be used again & again so long as the pulse
and the symptoms indicate their employment
I once tapped the Brain of a child under this
but the patient eventfully Died In Mania there
is a remedy more frequently employd than purges
In Chorea the purges is urged by Dr Hamilton —
The symptoms of the Incipient stage of this disease
indicate a Depraved State of the Alimentary canal
The Strongest purges Dr Hamilton found were necessary
to move the Bowels I have seen two cases
one was cured by purging the other is under
treatment now Dr. Hamilton says that Chorea
consists of two stages in the Incipient milder purgatives
are sufficient but in the Confirmed stage the strongest
are so administered that the second Dose may support
the Action of the former this Treatment is soon
followed by the health of the patient for sometime
after the Disease is removed the Bowels are to be attended

to and now Tonics &c as the Vegetable Bitters or preparations of Iron may be employd together with exercise fresh air a Nourishing diet &c In Epilepsy the Nervous and Arterial system as well as the Alimentary canal are affected advantages have Occurd from the use of Purgative Medes but I do not Believe they will cure the disease without tonics. Dr. Physick had a case of Epilepsy arising from a tumor of the thumb which was cured by its removal. Of the real nature of Epilepsy nothing is known: Dr Rush declare after studying the Disease for many years that his mind was totally undecided as to its nature. Headach is generally symptomatic of some other disease but many are affected with it who do not labor under any other Disease The nervous and Arterial ~~symptoms~~ stems and the Alimentary canal are more or less affected in different cases It is often caused by acidity on the Stomach indigestion &c There are a great variety in the seat of the pain sometimes it affects all the Head at other times only a Part it is sometimes dull at others acute sometimes constant at others Intermit sometimes it gives the Patient a sense of gnawing at others a sense of Opening and shutting of the sutures now and then the Cranium feels sore to the touch, the feet are frequently cold in severe headache the eyes are intolerant of the Light

Dr. Rush had a Patient who for 40 yrs was affected with headache. The headache is frequently dependant on intemperance, acidity of the stomach, constipation of the Bowels, too long abstinence, too little or too much sleep, obstructions of the natural evacuations, repelled Eruptions, blows on the head &c. Vomiting are to be employed to remove the remote causes. I have cured many patients by a breakfast & supper of Rye mush and gentle laxative Medy. The habitual use of cathartics ~~are demanded. Very frequently the heart & Arteries are affected as well as the stomach~~ frequently effected cure. Magnesia is particularly indicated when it arises from acidity. During the paroxysm if severe Vs is proper, tonics are sometimes required. In hysteric cathartics are demanded. Very frequently the Heart & Arteries are affected as well as the stomach & nervous systems. Dr Rush considered Hysteria as genuine gout. In many cases of dangerous diseases the occurrence of Hysterical symptoms is to be hailed as a favorable symptom. In violent cases of this disease Vs is to be resorted too as well as purgatives of the most drastic kind. In tetanus from wounds purgatives may have been recommended but this disease should never be treated by depleting remedies. The history of many of these cases said to be cured by various remedies have I doubt not been mistaken for other Diseases

In dropsical diseases the purgatives are a most powerful means of exciting absorption those best adapted to this are the Hydrogogues. These are principally the saline and at their head we place the cream tart there are however many cases of dropsy accompanied with a change of structure in some portion of the system here cathartics fail and the proper remedy is a gentle course of Mercury. Dr Hamilton has been induced to employ cathartics in Chlorosis from the symptoms of that Disease indicating a deranged state of the digestive functions He found more or less easily moved according to the stage of the stage of the disease he cautions us to persevere in our treatment untill the disease gives way. after purging has been carried to the necessary extent Tonics are to be resorted to. In cases of Hemetemesis in young females supposed to be connected with the uterus purges are proper. There is a species of Intermittent fever occuring in Infants badly fed & accompanied with tumid bellies, foetid breath a disordered state of the Bowels & Emaciation in which purging is the principal remedy I presume Dr. Hamilton has this disease for marasmus. It would be easy to swell the list of diseases in which purges are the proper remedies. I have mentioned principally those in which they form the prominent remedies In concluding I have to observe that in acute diseases we are

The time for getting in Pine

purges as assistants to the general plan of treatment but in chronic cases we use them alternate and hence their frequent repetition should be judiciously persevered in In these cases we are to employ those cathartics most agreeable to the stomach. Probably when we consider the great benefit derived from a regular state of the Bowels the good effects ascribed to the European mineral waters & springs may in a great measure be owing to their purgative qualities combined with the curative effects of the journey &c

Of Particular Cathartics

Vegitable. Sinapis. mustard white & Black To Obtain its cathartic effects the mustard is to be given unbruised in the dose of a Table spoonful three times pr day - it is the mildest and purest specimen of a Laxative

Juglans Cinerea, Indiginious. Dr. Barton declares the white walnut to be one of the most valuable of our native cathartics. The part employd is an extract made of the inner bark of the tree - It is laxative in the dose of from 6 to 10 gr - and in from 14 to 30 it is cathartic The Farmers employ it in their Veterian practice the pill made from the extract forms a common family med. among the Country People

Podophyllum Peltatum. May apple. this Medy. has excited much attention among American Physicians — the fruit is excellent and the leaves are poisonous the root is the medicinal part and the medium is 1ʒ I have not had sufficient experience with the Medy. to decide on the comparative effects of it & Jalap — I understand that it is very apt to gripe many however are very favourable to its employment I have found a larger dose necessary than of Jalap it has been used in most of the diseases where cathartics are necessary. The proper time for procuring the Medy. is in the fall after the leaves turn. One of its advantages is that it does not leave the Bowels in a weak state.

Manna. The product of the Fraxinus Ornus is brought from the Mediterranean — It is soluble in both in water and Alkohol We dare not say Cullen deny its laxative effects but he considers them as inconsiderable its dose is from 1 to 2 ℥ It is employed more on the continent than in England or America it is generally combined with Senna

℞ Manna ℥ i
Senna ℥ fs
Aqua lb fs

But I generally recommend the substitution of Brown sugar or Molasses for the Manna

Honey, Brown sugar, molasses and the summer fruits might have been added but the learning their effects which is merely laxative is sufficient. The best article to work off a purge is tamarind water, apple water &c. Cassia Fistula is to be placed on the same footing as the summer fruits which require so large a dose to produce its effects as to occasion Griping.

Oleum Ricini. The Product of the ricinus communis or Ricinus Palma Christi Inhabitant of the West Indies & south of Europe. The castor oil is one of the most ancient vegetable Cathartics being employed in the days of Hippocrates it is one of the mildest and safest cathartics it may be so managed as to any degree of Cathartic effect It is adapted to most of the diseases where we have recommended cathartics It seldom gripes I think I have however seen it occasion gripes. In most bowel complaints it has been preferred especially in colica pictonum. To remove foreign articles from the stomach (except copper on which it acts) it is well adapted as a general rule however I give no Mdc. in these cases the article by this means become enveloped in the mucus of the stomach and intestines and is prevented from irritating them. In colic and Dysentery the stomach becomes tranquil castor oil is proper

In Cardialgia verminosa it has been reccommended It is not so valuable an Article in those cases where debileting remedies are requisite the dose is ℥j a Teaspoonfull may be given to a child directly after birth a desert Spoonful to a child 3 or 4 Months old a Table spoonfull to a Child of 5 years old. The Cold pressd oil is less nauseous than that prepard by heat on account that the nature of the oil the vessel out of which it is to be taken should be wet to prevent its sticking to it It is generally bit in some cases given improperly given in Brandy I generally give it in Coffee which as effectually covers its taste It is sometimes given combind with mucilage

℞ Castor Oil ℥ij
White sugar
Gum Arabic aa ℥iij
Ol Anis — Drops VI
Aqua — ℥VI

Mixed in Data Mortar

This mixture I have seldom employd from the smallness of the dose and from its not being less nauseous than the simple oil Old Castor Oil even when rancid though less active does not gripe more than the recent oil In this opinion I find however I am opposd by the French Writers they say it purges less but gripes more they direct it to be washd in cold water before being used Oleum Olivae has been reccommended by Dr Chapman who is much pleasd with its effects

It is much less active than the castor oil and must be given in larger doses and being one of the Nutrientia no doubt a considerable part will be digested In several of the Bowel complaints of Children as in Cholera I have used Fresh Butter melted especially in clyster I think it about as good as flaxseed Tea Barley Water &c

Senna Cassia — Africa and Egypt the active properties are extracted alike by water & Alkohol. The Infusion is the Preparation most generally employment. The senna is so active a purge as to be ranked by Murry & Cullen among the Acrissa. The Mixt. is a very popular one not withstanding the largeness of the dose nauseous taste & griping qualities to obviate the latter is generally given combined with manna carminatives &c It is however a very certain purge and in cases of hernia I have known it purge when others have failed. The senna Tea is made by infusing

℞ Senna Fol ℥ss
Aqua Bull lbj
Sweeten ~~Dose~~

Dose a wine glass full every 2 hours untill it operates

Cremor Tart. is a very good addition to the infusion in the quantity of ℥j it is very often prescribed to accelerate the operation of Cathartics especially Cal

Among the different Officinale preparations of the senna the only two deserve to be retained

Are

57th

Compound Tincture of Jalap 33

Ae

℞ Senna ——— ℥ij
Jalap ——— ℥i
Fennel & Coriander aa ℥ss
Alkohol ——— ℔ iijss
Aqua ——— ℔ ijss

Warners Cordial for Gout

℞ Senna ℥ss
Rhei ℥i
Fennel ℥ij
Coriander Do.
Liquorice ℥iij
Saffron Petal ℥i
Alkohol ℔ij

Digest for a Week

Cassia Maylandica — Indigenous — Dr. Barton speaks in its favor I know but little about it from my own experience but many of our practitioners declare it to be an excellent substitute for senna

Rheum Palmatum. The Rhubarb is chiefly imported from China ~~Its~~ taste indicates its possession of an astringent principle — Hill thinks the the Rhubarb is a modern Mac. — It is purgative in its mild effects and easy in its operation — It appears to possess a tonic power with respect to ~~its~~ the Intestines conjoind with its purgative effects Its dose is from 20 to 30 grains

It was a favourite Mde of Dr Barton in combination with calomel I have also frequently employed it in the proportion of 10gr of each and conceive it will purge more under the same circumstances than 10gr of cal et 10 jalap In cases of habitual costiveness Rhubarb has generally been the purgative employed on its account of its not being debilitating in its effects on the Intestines. In chronic cases we occasionally direct the Rhubarb not checked with benefit. In dispepsia attended with costiveness I have found benefit from a pill Rhei et Zinziber In Acute affections of the bowels the Rhubarb is also a good remedy as in Dysentery in combination with calomel and in Diarhoea also.
The Astringent quality is supposed to act after the purging is over. Cullen hence thinks it improper in Dysentery but this is a refinement which experience does not establish. Fordyce declares it to be a narcotic and to induce sleep but this latter effect is to be explained on different principles In the Gout the Rhubarb is a very valuable purge in the form of warners cordial. In Jaundice cal et Rhubarb has formed a valuable remedy. In the diseases of Rhubarb is a Mde of great value I am in the custom of giving it combined with magnesia

Two Teaspoonfuls to be given to a child until it is perceivin the stool

℞ Pulv. Rhei ʒ ss
Calcined magnesia ʒ j
Ol Anis — gtts ii
Aqua — ℔ ij

I have employed it in Summer complaints of children & adults with benefit especially in Cholera where it with a diet of arrow root Barley Water &c with a drink of lime water and mucilage of Gum arabac has entirely cured the disease. It has been recommended as an anthelmintic but it acts here merely as a cathartic Spicd Rhubarb

℞ Rhubarb
Mace
Cinnamon aa ʒ ij
Water — ℔ j

Boil it to a half then add sugar and a little Brandy — I disapprove of adding much Brandy it should always be made fresh — Rhubarb Tea

Boil it to 1/3 Dose a Table Spoonfull in 24 hours

℞ Rhubarb — ʒ ij
Fennel seed — ʒ j
Water — ℔ j

This is administered to children with weak bowels with benefit especially in colics of the first months Opium is afterwards necessary Toasted Rhubarb — heat the powdered Rhubarb in a Spoon until it runs into a mass

brown and friable. In this form it is supposed to be best adapted to diarrhoea and to Gripe. The application of Rhubarb to ulcers worth ℞ is recommended by Mr Dover and Mom. In some cases it will be beneficial especially in that form of ulcer between the healthy & indolent — Convolvulus Jalapi The Jalap is a native of South America. The best root is the most black, compact and inflammable. It is sometime adulterated with White Bryony which may be detected by the light colour of the latter. Its active matter is resinous. It is an active and drastic purgative and like most resins when not levigated is very apt to gripe. Its dose is ʒ ss it is seldom given by itself. In combination with an equal quantity of crem. tart. it is an excellent purge in habitual costiveness hip disease and where ever long continued purging is required.

Dose a Tablespoonful every 2 hours — ℞ Jalap — Crem Tart aa ʒ ss Ol Anis. — gs

It forms an excellent purge combined with calomel in Bilious diseases. Cullen considers this combination the best Hydrogogue and Anthelmintic purge. The resin of Jalap has been too much neglected. I have employ'd it in the following form advantageously

℞ Pulo Jalap gr 64
Rhei — gr 64
Resin Jal — gr 32
Ol Mentha gtt —

Misce et fiat in Pilulae LXIV

As a Laxative one in the Evening as a cathartic take 2 every 2 hours until they operate
Aloe Perfoliata — Inspisated Juice it is a Gum Resin there are three kinds the Socotrine Barbadoes Hepatic and the caballine the Soccotrine is the best The Aloe has been in use from the earliest ages of Mdc. It acts principally upon the large intestines and produces some effects by augmenting their peristaltic motion It has been said to produce Hemorhoids Dr. Cullen has endeavored to remove this imputation on its character I have found other cathartics produce the same effect 2 gr will act as a laxative a watery stool can scarcely be produced by less than ʒj — and then it will occasion griping
Gamboge — It is imported from the East Indies It acts both as an Emetic and cathartic it is one of the most active & drastic purges we know of In cases of Tenia it has been much used the dose is from 2 to 5 gr and with 10 of calomel is an excellent Cathartic in all Bilious complaints It may be given in larger doses as 8 gr See Cullen

Professor Murray gives us the detail of a number of Experiments by different physicians with a view to obviate the Acrid Properties of the Mde but without succes The Article has been used in Dropsy but I recommend it to you as a purge only in combination with calomel

Convolvulus Scamonia. This Mde is brought to us from the Mediterranean its active properties resides in a Gum resin the Celebrated Scammony is the best Cullen thinks it a good purge it was formerly much employd but it is certainly a harsh and powerful remedy From the uncertainty dose a given quantity not procuring a given result it should not be employd alone. Cullen Only objection to it was the difficulty of getting it pure It dose is from 2 to 10gr.

Cucumis Colocynthus It grows in Turkey I place it on the list only because I found it there I have never used it Should I ever use it it would only be in cases of mania as in this disease from torpor of Bowels the most powerfull Mde are called for In doses of a few grains it occasions pain Bloody stools &c Its dose from 2 to 6gr

Helleborus Niger. This is one of the oldest Mde upon our lists it is frequently called Melampodium

from the first person who employ'd it It was anciently much employ'd but it now gives way to milder but at the same time a effective Cathartic It has been employ'd extensively in Mania but there is no reason to suppose that is has any specific effect in this disease. In Amenorhoea Dr. Mead reccommends the Tincture and it has been us'd as an emenagogue with benefit

Veratum Album. White Hellebore this Medc from the harshness of its operation has been laid aside it sometimes occasions deleterious effects as convulsions &c

Cucumis Agrestis or the mimordica Elaterium is the most violent cathartic of all we have mentiond in small doses as a 1/2 gr every hour or two it purges violently It occasions more pain during it operation than any other purge Dr. Ferria has lately reccommended the Medc in Hydrothorax

With this Article I close my Account of the Vegt. Cathartics many more might be added but after much reflection I do not find them entitled to a place while we have so many superior Articles

Of the Mineral Cathartics — Calomel — Perhaps the whole class of Cathartics contains no one article so much employ'd as this There are a few cases in which it is contraindicated — Dose 10 gr There is however a Diversity in the effects of the Medc

not yet explained thus we hear of small doses as ½ gr operating violently while we at the times give as great a quantity as ʒ ss without any inconvenience Dr. Mayo performed on himself an experiment to ascertain the greatest quantity of calomel that could be taken with safety and the smallest that would purge he took at one ʒ gr at another 80 gr and no more violent effects were produced by the 80 gr than by the ʒ gr Calomel as a purge operates by increasing the secretions poured into the Intestines given alone it certainly nauseates and produces more Irritation than any other Article now employed In some constitutions Cal from an Idiosyncracy produces syncope spasm of the Bowels and in ~~any~~ others a violent salivation. Taken at Bed time the calomel remains in the bowels all night & operates in the morning The calomel is well adapted to bilious diseases it is generally combined with Jal — or Rhubarb in the proportion of 10 to 1 it is also sometimes given with Nitre in small doses

℞ Cal —— gr 8
Nitre —— ʒ j
Tart Emetic gr 2
Misce et fiat Pulv.
No 8

There is no Med. so well adapted to infantile con It is best to give on a little Molasses or for older children stewed or bread and Butter There is scarcely a disease Incident to children in which it is not proper

But it is very unpopular among persons out of the profession. It should not be repeated frequently but at short intervals to children as it may occasion Ptyalism and a dangerous circumstance in them Dose for a child 6 months old (and I seldom give it earlier) 2gr to be followed speedily if it does not operate, by a desert spoonfull of castor oil or a repetition of the dose For a child 1 year old 3gr - 2 yrs 5gr. However desirous I may be to make you bold I am desirous to warn you from becoming rash practitioners. Do not prescribe calomel in every trifling case in children castor oil & Magnesia are better adapted to common cases Several other preparations besides calomel are Cathartic but are not used to meet that indication Sulphur ranks in activity with the laxatives it has long been employ in even from the earliest Greeks in the dose from 1 to 2ʒ it is gently laxative it is supposed to act more on the small than large intestines and by increasing the peristaltic motions and hence is well adapted to costiveness from sluggishness of the bowels In itch and other diseases of the skin of a similar nature the sulphur is much used In Pinea capitis Dr Chapman has employed it but it fails with me I think the Better remedy of Dr. Physick Superior ℞ Fresh Butter saturated with Dry muriate of soda

In Gout and Rheumatism sulphur is less important than the other cathartics. In dysentery it has been employed on the continent but is not adapted to the dysentery of America. In remittent and Intermittent fever (mild cases) ℥j of sulphur 2 or 3 times per day I have found beneficial. Greinger recommends it in Brandy but this is improper. Sulphur has been supposed to remove (even a roll of Brimstone in the bowels) spasm of the muscles by the vulgar but it is perfectly inert. Sulphur and cream of Tart is a very popular Mde. much employed in the Spring season but all Mde are improper in health. Magnesia is a laxative of much value. The pure and sub carbonate of the shops differ so little that they may be employed indiscriminately except in cases of excessive flatulency. When administered alone the Magnesia is a mild laxative by combination it becomes increased in power. Its most important quality is that of relieving acidity of the stomach hence it is use in Dyspepsia Gout &c.

The Neutral Salts have generally been placed between the Laxative and cathartics purgatives but some of them are among our mildest whilst some are ranked among our strongest cathartics. They Increase the secretion poured into the Intestines and by thus emptying the vessels they form an important article in the list of Antiphlogistic remedies

Of the Saline Cathartics Sulphas Soda or Sal Glauber is the most important it is mild in small doses its activity being increased by increasing the dose The medium dose is ℥j For a Child of 4 or 5 yrs ℥ss the water of crystalization forming near a half of the crystalization of salt we are to be aware of giving the same quantity of the efflorescent salt the dose is half the quantity Lemon juice, vinegar Cream Tart &c have been used to disguise the taste The seltzer or Soda Water of the shops is well adapted for this purpose In febrile diseases the following forms an excellent prescription

Misce et fiat Pulv. ℞ Sulphas Soda — ℥j
Do VIII Capiat Tart Antimony gr j
Unam omnia secunda hora

The Glauber Salts when exhibited as a Cathartic or Laxative should always be dissolved in hot water

Epsom Salt or Sulphas Magnesia is nearly allied to the foregoing in its properties it has no advantages over it I prefer the former The ~~dose~~ diseases that it is employed in and manner of Administering it are the same Both these salts form an excellent addition to Calomel or any of the active cathartics when they do speedily operate — Rochelle Salt Tartrite of Potassa et Sodae this is not so nauseous as the

former Dose ℥j

Cremor Tartar — Super Tartrite of Potasse this is by no means so nauseous as any of the former and with sugar and water forms a very agreeable beverage which may be drank to work off other cathartics The common mode of exhibiting it is in Molasses in doses of ℥ij every 2 hours untill it operates as it is apt to induce flatulency it is improper in gout &c But in Dyspepsia & acute diseases of children &c it is a very good Medy

Soluble Tartar Tartrate of Potasse is both cathartic and diuretic it is mild in its operation Dose ʒiʒ to ℥ij

Phosphate of Soda this Medy acts in the dose of ℥j it is not so cooling as the other salts and causes thirst &c. These saline cathartics should never be given in soup as is the custom in Europe especially in acute diseases for we by this means convey nourishment into the system I have now finished the list of cathartics and do wish to add another to it unless it has properties superior to those which now belong to it ——

On the combination of Medicines. The most ancient recipes on record contain a farrago of useless articles which dilute the active properties of the principal ingredient — A modern Physician who being asked by Dr Barton why he gave so many articles at a time replied that the disease might select the one best adapted to it. Modern Chemistry has so completely revolutionized Medy as in a great measure to overcome the prejudice of complicating remedies The too great simplicity of prescriptions is equally an error all Medy of the same class have not the same effect & by combining them we obtain the virtue of two or more thus if we wish to remove acidity & at the same

lim actively to move the Bowels we would combine with some of the active Cathartics as the Rhubarb &c Our experience on this prove — 1st The Absurdity of swelling our prescriptions with a number of heterogenous Articles & 2d the propriety of combining such articles as may tend to aid or correct the action of each other — Of Enemata the rectum like other hollow muscles act when distended & when it operates the action is continued by sympathy through the large intestines and probably the small there are many cases in which injections are superior to the continent they are employed generally to obviate costiveness tepid water and sometimes and sometimes cold water are the only injections and but there is an objection to Enemata as correctors of costiveness which is that after sometime the rectum being use to them will contract on the Enema being administered if costiveness be only occasional the same objection will not hold —

Cochlea

℞ Muriatis Sodae
Molasses
Oleum or hog lard a a spoonfull
Solve in fill

Forms one of the best injections we can employ Enemata is used for the purpose of expediting the action of cathartics & it has been supposed that decoctions of purging herbs will per injections produce this specific effect but they only act in proportion to their stimulating effects — In Ileus and Hernia the Tobacco injections is generally employed

℞ Mic Tobac — ℥j
Aqua Bull lbj

Inject 1/2 and the residue in two hours afterward

Diuretics Medicines are such articles as increase the secretions of urine. This may be effected by either augmenting the quantity of fluids in the blood or by stimulating the kidneys. There is no means of producing diuresis so ~~some~~ certain as by drinking copiously and where it can be resorted to there is none so safe. There are many diseases in which diuretics are prescribed to carry off certain fluids effused from the system as in dropsy and here it has been supposed improper to take in fluids by the stomach. The Older Physicians in these cases directed entire abstinence from drink. But Dr. Cullen and the latter physicians are of a different opinion and we even find it a custom with some to attempt the cure of Dropsy merely by drinking. The proper practice here as in every other case will be found between the these opposite opinions By giving too much drink we fill the Bloodvessels increase the secretion of the urine, sweat &c. What security have we that the serous secretions are not increased also — There is great prudence and sense in the remark of Dr. Cullen that where the water taken in ~~to~~ if found to increase the urine beyond the Quantity of water taken in the practice may probably be continued with great advantage but not otherwise.

During the reign of the Humoral pathology Diuretics were supposed to act by evacuating vitiated matter from the Blood That the blood is not more acrid at one time than another I am not at all willing to allow many facts prove that it is a fact of importance to know that diuretics act so that the flow of urine shall be in an inverse ratio to the cutaneous perspiration hence the application of cold to the Skin or to the pubes has been resorted to to produce diuresis I believe these however to act more upon the muscular fibres of the bladder than upon the perspiration I infer this from the fact that the application produces its effects too prompt to act upon the perspiratory secretions and determine the fluids to the kidneys. The consequences resulting from diuretics are a disturbance of the Ballance of the Circulation an increased absorption and a decreased serosity of the blood The time necessary for a diuretic to pass the kidney is perhaps not uniform. Home on examining the the urine after taking the Rhubarb found that in 17 minutes the urine was tinged There have existed disputes whether diuretics produced their effects by being absorbed by acting on the stomach and sympathetically on the kidneys or are

conveyd to them by a direct conveyance. In Diabetis there is more urine discharg'd than there is ~~the~~ matter taken into the system and Purr relates a case where no urine was evacuated for a considerable time. There is a fact that many substances taken into the stomach produce a speedy discharge of Urine and in some cases the odour and colour of certain articles are Detected in the urine. These facts have occasion'd a doubt whether there be not another vent to the bladder than that by the circulation of the blood. Haller relates several cases that would lead us to believe it. Darwin also relates several cases which would apparently lead to the same conclusion. I saw a case where one of the kidneys was entirely destroy'd by suppuration and the other very much diseas'd and yet the patient evacuated urine. Home Instituted experiments on dogs &c which go far to prove the existence of some other communication besides that of circulation between the stomach & Bladder he at first suppos'd this medium of communication to be the spleen but he afterward rejected this opinion. Darwin suppos'd all the facts before ~~explain'd~~ mention'd to be explain'd upon the supposition of regurgitation of the contents of the absorbents. The arguments I alledge against

such an opinion are 1st. That no urine is to be found in the Absorbents 2d. That the urine is a Liquor sui generis and essentially different from the contents of the Lymphatic system 3d. The valves of the absorbents would effectually prevent any such regurgitation Darwin has attempted to overcome this last objection misquoting Mr. Hewsons book on the lymphatics of fishes. Lastly I would urge that no anastomosis has ever been discovered between the Absorbents of the stomach and Bladder as Darwin would wish to prove by again misquoting Hewson The subject is still undecided and I shall now merely throw out one or two observations on the subject 1st. It is certain than animals have been destroyed by the destruction of the Ureters 2d. If the thoracic duct be tied and colouring matter yet finds its way into the urine there must be a passage as yet undiscovered to the bladder. 3d. No Vessels have been discovered by anatomists opening into the bladder but the Ureters 4th. Darwins Theory is utterly incapable of explaining the fact 5th. After all I have many doubts whether or not there be any communication than by the circulation what proof have we that there is no other communication between the Absorbents & the Bloodvessels than those now known to the Anatomists

Diuretics are an ancient class of remedies and are now employed in a variety of morbid affection In dropsy their action is less certain than in any other diseases If Dropsy depended merely on a defect of absorption our prescriptions might be more effectual in curing it but it frequently depends upon disorganization of structure in the spleen & the manner in which diuretics act in Dropsy is by the copious discharge of urine emptying the vessels which induces an increase of absorption to refill them Fordyce declares it to be very difficult to obtain a discharge of dropsical fluids by diuretics alone he therefore directs a combination of them and with purgatives In most of the Febrile diseases diuretics are employed ~~to~~ with advantage In several of the pulmonary complaints as in consumption & Asthma they have been employed. In local affections of the kidneys and Bladder we employ diuretics with advantage In the primary stage of Gonorhoea they have been found beneficial ——

Of Particular Diuretics

Most of the Neutral salts act upon the kidneys but many have other properties superadded which prevent their being employed with benefit as diuretics most of the Acids are diuretic and two of the Alkalies ——

The vegitable alkali has long been employd as a diuretic the dose of the sub carb. Potassa as a diuretic is 20 to 30 grains but after being continued some time it occasions affection of the stomach — The soda is never I believe employd merely as as a diuretic whether the Alkalies are of themselves diuretic or are only rendered so by the union of the acid they meet with in the primæ Viæ is not known Pringle was in the custom of combining in certain cases of Dropsy accompanied with a weakness of the stomach the Alkalies with Bitters &c Dr. Murray retains in his list of diuretics the Acetate Potass: but is so uncertain in its effects that I do not wish it to be retained —

Nitre is one of our best diuretics — I am surprised that Murray should declare its powers so trifling as to render it of little use in Dropsy It is now much used the proper dose is 8 to 10 grains every 2 or 3 hours the dose may be increased as the stomach becomes accustomed to it profuse diuresis can seldom be produced untill the dose amount to ʒ ij or IV in the 24 hours The Nitre forms the Basis of many powders employd in inflamatory diseases Dr. Rush's powder is a very excellent combination of this kind I direct it thus

℞ Calomel — gr VIII
Tart Emet. — gr ij
Nitre — ʒ j

Misce — et fiat pulv
No. viij

70th

Dr. Physick is in the custom of substituting the Nitre for sulph Potasse in the Dovers powder It is a common practice to exhibit Nitre in Dropsy in solution in the quantity of ℥j to lbj of water each spoonful of which will contain 70 or 8 grains of Nitre The practice is a very popular one I think it would be highly improper to reject this article from among the lists of diuretics Cream Tart Super Tart Potash This is the only saline Diuretic which Dr. Chapman thought proper to retain Dr. Ferriar states that 33 out of 40 cases of Dropsy were cured by it as it is cathartic it is indicated and is beneficial in Dropsy accompanied with Febrile disease it produces the best effect when it acts by inducing profuse watery stools and a discharge by the kidneys The most usual way is to give it dissolved in a little water or in combination with syrup and in such doses as to occasion catharsis as I believe it difficult to administer the Mur. so as not to purge when this latter is not indicated I never employ it It is said to fail when other diuretics have succeeded but this is true of all The Sol Tar — Tartrate of Potash in small doses Dr. Physick considers the best and safest diuretic dose ℥j to ℥ij every 2 hours The Soluble Tart. is formed by joining 1 part of Potash and 2 parts of Cream Tar —

Dulcified Spir: Nitro. This Article should not be longkept as it is apt to be decomposed and the Nitric acid is reformed By saturating the acid with lime water it is again rendered fit for use. The Spirit of Nitre is evidently stimulating and hence improper in acute cases it is admirably adapted to those in which debility has supervened the other evacuation. Combined with Vini Antimonii it forms an excellent diuretic and Diaphoretic especially in cases of Children Dose for an Adult

Of the Nitre spirit 20 Drops ℞ Spt. Nit gtts 30
is a Diaphoretic - 30 a Diuret Vini Ant gtts 30

In certain Autumnal diseases with pain in the Back & and with Billious symptoms I have found it good as an anodyne after Op

Digitalis. Dr. Barton is of Opinion that the title purpurea is incorrect the flowers not always exhibiting that colour he suggests the Idea of calling it the Digitalis officinalis The plant was described as early as the year 1542 The leaves of the plant to obtain it in the greatest perfection should be gathered when the plant is in flower rejecting the ribs and fibrous part It is without doubt the most powerful diuretic we know it is also powerfully Narcotic —

No Medicine lowers the pulse so powerfully as this this Dr. Moore experimented on the Article and found that 1/2 gr accelerated the Circulation in ten Minutes increasing the pulse from 72 to 73. A Similar effect was produced by 3 gr In very large dose no precursor mark its effects they are in general Vertigo nausea and most of the symptoms ensuing from narcotic Mde. There is one quality of the Mde which requires attent. I allude to the circumstances that the Mde may be given for sometime without producing its effects when suddenly they will be produced to a dangerous extent. This is not however a very frequent occurence The effects of Digitalis on the pulse varies with the situation of the Body In its depressing effects it resembles very much the Tobacco and the Stramonium & I have generally given the Digitalis in Combination with Nitre

℞ Nitre — gr X
Digitalis — gr j

The safest dose is to begin with is 1/2 gr The form of Pill I do not approve of when infusion is preferred the following is the best Recipe

℞ Fol Digitalis ℥ss
Coque — and after Cqua — ℥ VIII

℥j is evaporated add alkohol to make up the loss dose a spoonfull every 2 hours

The Tinc. Edinburgh dispensatory is made by adding Fol Digitalis ℥j to ℥viij of Alkohol Darwin made his Saturated Tinc. from ℥j of the Digitalis to ℥viij of Alkohol Dose from 10 to 15 Drops the Decoction or extract I have never given It is very necessary to watch the effects of this Med. after using the dose you commence with two or three days it may be increased 1/4 of a grain when it purges Laud. may be given when it produces its narcotic effects the usual remedies of narcotic poisons is to be had recourse to There is great diversity of opinion with respect to digitalis In 1775 Dr. Withering called the attention of Practitioners to the Med. he found it powerfully diuretic which he ~~found it~~ presently he does not conceive to depend upon Nausea and Vomiting on the contrary he found these diminish its effect and the same is true if it purges Dr. Darwin used the Digitalis in Dropsy from debauchery in combination with bark &c and Fernier found benefit from the remedy in Dropsy There is now scarce a Practitioner that does not use it and there is no variety of Dropsy in which it is not proper In Hydrothorax I have known it beneficial but it frequently fails I prefer Vesicatories and squills In every case of Dropsy the condition of the system is to be attended to

If Fever be present Vs &c is to be resorted to the experience of my Medical friends is against giving the Digitalis while the pulse is tense See Withering who says the stake of the Palsy or stone in the Bladder should not prevent its use It is said to be of benefit in those Anasarcous swellings following febrile diseases as scarlatina I have however generally treated in this disease much less dangerous by the crystals of Tart – The following aphorisms from Withering appear to be true 1st Digitalis will not always act as a diaphoretic 2d It does so more frequently than any other Article 3d It will frequently produce this effect after every other has failed. Besides Dropsy there are other diseases in which Digitalis has been employed it has been employed to diminish the force of the circulation especially by Currie &c. bleeding has been considered as an unnatural remedy and our Mde has been looked upto as a means by which it may be superceded In Active hemorhagy the Digitalis has been extolled but in the diseases it is very difficult to ascertain the effects of Mde the disease frequently stopping of itself. That digitalis is not an inactive remedy I am assured but that it is an improper remedy one in active hemorhagy I am certain – Vs is the only remedy Digitalis does not always certainly diminish

the action of the Heart and Arteries and hence we cannot put Confidence in it Case in which I conceive it proper is where Op has been used to a considerable extent the febrile symptoms being diminishing - to prevent its return it may be used. Dr. Clapman has seen cases of Uterine hemorhagy which have been increased by the digitalis these cases he very properly observes require Md. Which diminishes the force of the circulation and at the same time constrings the gigantic vessels of the Uterus The Inflamatory and febrile diseases the digitalis is laid aside In diseases of the Thorax it has been extensively prescribed than in any other diseases In Spasmodic Asthma and whenever this disease is accompanied with oedematous effusions and indicates it connections with Dropsical effusion the Foxglove is proper Dewees was in the habit of using it in Asthma unconnected with effusion a prescription by Dr. Physick In one case I saw a cure effected by it

Dose gutta 1000 ℞ Tinc Bal Peruvel ou Tolu ℥j
40 ter die
Liq Lacc. — ℥j
Tinc Digitalis ℥ß

In Pulmonary consumption the employment of our Med has excited great attention by some it was supposed to be a perfect specific & if you believe the report of Practitioners for some year past you would think one the —

Opprobria Medicorum was now removed
Shinglade, Ballie, Drake &c. speak in its favor
one of these has had much experience with
the Article has related a number of cases from
the result of which I must acknowledge that
many Pseudo Phthiscal cases have been cured
and others relieved See Beddoes who speaks of
the Article in the highest enthusiasm. Our
practitioners have used the Md. extensively but
their experience is not so much in its favor
That the reports of the European practitioners
are erroneous is a fact from the Number of deaths
in Europe not being decreased. Consumption
has been defined a disease of the Lungs accompanied
with a great Emaciation cough difficulty of breathing
Marasmus, hectic fever & sometimes a purulent
expectoration. Chronic cases of Catarrh and
Pneumonia are by no means to be considered as
consumption and these latter have been the cases
said to be Consumption cured by Digitalis The
change of Temperature of the weather in our
country produces frequent Inflamation which
are not unfrequently followed by diseases of the
Lungs difficult to be distinguished from con-
sumption but which finally are recovered from
The Idea of the difficulty of healing ulcers
in the legs from the Nature of the Structure

and constant motion of these parts is by no means correct for we have seen extensive accidental injuries of the lungs and notwithstand the constant ingress and egress of air we have also seen cases of suppuration of the lungs entirely recovered from the disease of the lungs in consumption is a morbid action differing from every other discased action — The Primary state is that of Tubercle looking scrophulous but differing from it these Tubercle suppurate and produce ulcers which are tardy in healing The Difficulty of curing consumption arise from this after one tubercle discharges its contents another fill & ulcerate and so on continually It must be acknowledged that in some cases of consumption there are no Tubercles the suppuration being furnished by the air cells &c we find small vomica The Tubicular consumption is the most frequen there is no reason to conclude with Dr. Rush that tuberculi are the termination of inflamation. I believe the symptoms of consumpt to be a pure specimen of hectic fever arising from the sympathy of the system with the local irritation of the lungs I believe Foxglove to be totally insufficient to effect a cure of consumption though it may palliate symptom the pulse frequently becomes very frequent and the digitalis

has the effect of reducing the ~~effect~~ frequency some have thought that by reducing the pulse we may cure the disease but this idea is erroneous the effect of digitalis as a diuretic may also have some effect in relieving the thoracic affections There are many cases in which inflamation attacks the lungs & leaves most of the symptoms of consumption on its recession here Digitalis in combination with other remedies are of importance I have found its good effects to be in a ratio to the degree to which it diminishes the pulse A late writer recommends 10 drops of the saturated tincture in a saline draught the dose may be gradually increased the pulse being carefully watched during different positions of the Body that if any of the bad effects of the digitalis supervene we may lay it aside It is in Incipient stages of consumption that the effects of our Medy are most striking Our most recent Author declare the remedy to be useless and I declare it to be impolitic in the latter stage Dr. Rush pronounced it a poisonous weed and Dr. Barton found no benefit from it from the above views I think the inference may be drawn that the cases said to have been cured by digitalis were merely cases of Chronic catarrh and without any Tubercular disease There is one case of disease in which I think Digitalis hastens the termination. I allude to large collections of pus in the thorax. The patient lies very easy on one side but on moving to the other the bronchia becomes filled with pus. which is expectorated I conclude this article by remarking that I have found it do wonders in cases about to terminate in consumption but even here it is not to be trusted to without the assistance of bloodletting.

Digitalis has long been employed in epilepsy but not as I have seen with any advantage Hereditary epilepsy is in my opinion incurable. Digitalis has also been employed to effect different indications in Mania Dr. Rush mode of treating this disease is the best and digitalis forms no part of it In Hydrothorax Hydrocephalus digitalis has been employed Dr. Cheyne as he states used it in but few cases indeed he found benefit from it but as it acts differently in different constitutions it must be he thinks an uncertain remedy A powerful argument against its use in this disease is that we have not time for its employment as it requires gradually and cautiously to be increased and the disease runs its course so speedily see Cheyne. Neither rachitis or Gout can I conceive the Mode to be proper I could swell the list of disease greatly in which ~~I am in~~ Digitalis has been employed and recommended but I am against its employment and must warn you against paying too much attention to the extravagant praises with which a new Mode is ushered in Digitalis has been externally employed in certain ulcers but I have no experience with the Article in this mode Nicotiana. It has been introduced into our list of diuretics. Barton and others speaks in its favor It is employed in Tincture & Infusion —

Dose from 30 to 60 Drops — { ℞ Tobacco ℥j
Aqua — ℔j

I have no wish to see this article employed while we have so many better diuretics.

Squills. The squill is one of the oldest diuretics Cullen thinks it has no direct action upon the kidneys but declares it to be an universal stimulant upon every secretion It operates primarily upon on the arterial system by exciting the pulse but lowers it by consequent evacuating powers the squill has been long used in dropsy I have succeeded best with it in dropsy of the chest Hydrothorax which is ~~not~~ also the experience of my Medical friends when it is given as a diuretic it is generally in substance from 1 to 3 grains I have generally given it rubbed up with sugar which is also the direction of Desault It may be given in the form of Pill. Aromatic have been added to destroy its nauseous taste I generally give 1gr 2 or 3 times p day for the first day and the second day Increase gradually to 5 gr to 2 or 3 times p Day I have seldom found the stomach bear a larger dose. There are writers who recommend it in much larger doses to excite vomiting thinking it acts as a diuretic merely on that principle. Home declares that the Mde will seldom operate without inducing nausea. Cullen objects to such an opinion and declares the nausea only necessary to indicate that it is active I have seldom found the Mde active without nausea being produced. It is frequently combined with Opio to prevent its purging or creating nausea. In combination with different preparations of mercury it is also given I generally employ Calomel notwithstanding Dr Cullens objection that it is determined to the intestines which is generally untrue. This combination forms an admirable diuretic well adapted to Dropsy accompanied. it does sometimes purge

but this can be prevented by Opium It also gently produces Ptyalism which is frequently a favorable circumstance The calomel may be given to the extent of 1/2 gr I recommend this combination of calomel and squill as a most powerful Diuretic Balsam Copaiba the product of the Copaifera officinalis — The longer this Balsam is kept the more viscid it grows but it will not become opaque without being adulterated like most resins it stimulates the kidneys the urine discharge immediately after having a peculiar violaceous smell The dose is 30 drops but as it nauseates it is best to begin with 20 drops this Article is not much used in Dropsy It is most celebrated in Gonorhoea and in Leucorhoea this is an old Practice lately revived It is a fact well ascertain that Gonorhoea will wear itself away and hence we should not be surprised at the variety of articles to have cured this disease After a considerable attention has been paid to this disease I think the Golden Rule of attention to the state of the system should not be neglected, In the commencement of the disease there is considerable inflamation sometimes requiring V.S always purging There is no doubt that a judicious use of Injections is of benefit in Gonorhoea and I am decidedly against the promiscuous use of Balsam Copaiba though I have no doubt that balsam early employed in combination with depleting remedies

is very beneficial it may be given mixed with Molasses or brown sugar in the dose of 30 drops 3 or 4 times pr Day I believe it acts not only as a depletant but also by medicating the urine Dr. Chapman found the following formulae to obviate ~~extremes~~ the action of the stomach or bowels produced by the Mode

℞ Balsam Copaiba — ℥ss
Spt Nitre — ℥iij
Spt Lavender — ℥iij
Liq. Laud — ℥ss
Gum Arabic — ℥ij
Aqua — ℥iv

Dose a Table spoonfull 3 times pr Day if however it still nauseates its use should be stopt a day or two our Mode has also been employd in Hemorhoids & gleet Oil of Turpentine The common resin acts as a diuretic but the oil of Turpentine much more powerfully I do not know that it has been used in dropsy on account of its other properties It has been given in gleets in the dose of 5 to 10 drops with molasses or the yolk of an Egg I advise much larger doses. The resin rubd up with Nitre or Sugar in the dose of 10 grs 3 times a day is a good remedy for gleets. Polygala Senega — It grows abundantly over the continent of America the root is the part employd — In 1739 Dr. Tennant brought this Mode into use and recommended it as an antidote against the bite of a rattlesnake

It is a very general stimulant I think it is a doubtful diuretic not to be confided in while we have so many better ones Millman and Percival speak in its favor in Dropsy Barton in his notes on Cullen Mat Medica say that it is entitled to more attention as a diuretic than Cullen has supposed Dose from 30gr to ℈j 2 or 3 times a day of the powdered root the decoction is made by boiling ℥j of the root in ℔j of liquor Dose for a child a Desert Spoonful every 2 hours The European practitioners have employed this Med. in in pleurisy from its stimulating effects I should dissent from this practice In croup the Seneka has been highly recommended by Archer & others. I think too highly it has been found most useful when it acts act as a general evacuant producing cathersis emesis &c but it should never be preferred to Emetics or the lancet It has also been employed in the gout Bartons list contains many other articles which probably are diuretic under certain cases and others so inert as not to be of much importance An Infusion of the roots of pearsley have been used to relieve strangury from blisters but I have found simple water succeed as well the Lobelia Syphelitica has been found diuretic The Meloe Vesicatories Spanish flies when the Med is used internally its effects on the urinary bladder are evident. The Tinc of Cantharides in doses from 5 to 10 drops has produced very striking diuretic effects

In Diabetes the Mdc. has also been employed it is not to be trusted as a diuretic in large doses it occasions great pain in the kidneys ulceration in the Bladder &c The Tinc is made of Alkohol Dose from 10 to 20 gr

I think the cases to which it is best adapted are those of gleet & leucorrhoea Dr. Robertson of Edinburgh has advised ℞ ʒ in ℥VI of water dose ℞ teaspoonfull twice a day In person disposed to consumption and glandular affections he prohibits the use of the Mdc. It is a dangerous Mdc. in large doses Home & Barton have employed it in typhus fever It has also been employed in Tetanus

Antilithics

These are such Mdcs as palliate or relieve the symptoms of calculus That the medicine may be prevented the accretion of the calculus, or remedy the acrimony of the urine or soften the calculus is very probable The term Lithontriptic is I believe incorrect. These symptoms from stone are such as cannot but induce Physicians to attempt their relief The Older Physicians considered calculi the effect of fatty earthy degeneration of the urine. One point appears clearly made out viz that healthy urine contains the substance from which the calculus is formed waiting only for a Nucleus around which it may be formed Notwithstanding the existence of calculus

matter in the urine there entirely when calculus diathesis is present the urine containing a greater proportion and does not require a nucleus in order to form a stone That gouty persons are subject to stone is evident but it occurs frequently where there is no gout present neither do I think the stomach to have any agency in its promotion many attempts have been made by the Chemists to discover the formation of calculi all their Labors have terminated in informing us that the calculi are formed of a variety of different Materials the Labours of Willaston have fully developed the chemical composition of the calculi he classes them into division Brand also makes 4 classes but all this is useless in a Medical point of view. Alkalies & Acids have the effect of dissolving calculi out of the body and attempt has been made to inject them into the Bladder I made many experiments with the Gastric Juice as a solvent of calculi & found it would dissolve calculi out of the Body and might be injected into the Bladder but I believe that the secretion will go on as fast as the solution Large doses of Alkalies &c given by the Mouth has been supposed capable of dissolving stone frequently the stone becomes encysted and no longer troublesome and the Lithontriptics have had the precise stone undoubtedly have been felt in the Bladder during life but on dissection could not be found

The most rational views I think of this class is that of a lithontriptic is found it will be a substance which will act by medicating the urine and thus convert it into a solvent or that may be injected into the bladder without irritating that organ The stone is a disease attended with exacerbations & remissions The Medicines fit for the stone are those which act on the whole system as Opium &c But there are not what we mean by antilithics some of them act by softning the stone and the other by no apparent effects on the stone

Of the Alkalies & the Alkaline Earths these have been long known to be capable of relieving the symptoms of stone all the varieties of calculi Dowcey found capable of being dissolved out the Body in caustic alkali. Soda and potash administered by the mouth are found to impregnate the urine which urine has been found capable of dissolving the stone out of the body The chief difficulty is that the stomach and Bladder becomes so irritable that it is necessary to lay aside the Medicine before it can effect the solution of the calculi These frequently however relieve the symptoms considerable probably by acting upon the lithic matter throughout the system or probably by dissolving the rough surface of the calculus and rendering it less irritating

or probably by diminishing the Inflamatory dia-
thesis by evacuation. Potash this is an old Med.
in the stone it is to be given in Solution 15 to
20 drops twice a day gradually augmented It is
customary to order great quantities of mucilaginous
drinks along with the Alkalies Mar the quantity
of water will do the same good as the mucilage
cannot reach the kidney nor bladder in that stat
Carbonate of Potash is the best adapted to
relieve the symptoms of stone and agrees bette with
the stomach dose 5-10-20 gr 2 or 3 times pr Day un
till the urine becomes charged with it
Super Carbonate is still better adapted to the
relief of stone the Best method of exhibiting it extem
poraneously is to direct Potash to be dissolved in a ~~decan~~
glass of Artificial seltzer water dose of the super carbon
ate ℔ ss 2 or 3 times pr day Soda effervesces and
hence can be made into pills with soap dose ʒ ss to
ʒ j at day even larger quantities. Bostocks relates
a case where a Lady gradually increased the
dose to ʒ iij a day the serum of this Ladies blood
was found upon analysis to be alkalescent It may
also be given in saturate solution with carbonic
acid these remedies will not dissolve the stone only
relieving the symptoms Home relates a case where
the Alkalies were taken for a considerable time until
not a symptom of stone remained on Dissection he found
a stone

Brande relates that ℥j of the Alkalies were taken ℥j of water and shortly after a copious flow of urine was the effect containing a copious precipitate of phosphate occasioned by the saturation of the excess of the Phosphoric Acid The urine also in some measure reneued the colour of litmus reddened with vinegar. Soap which is commonly mentioned as a lithontriptic place among the Alkalies it contains alkali. It is now seldom used except as a Medium to make pills — Lime though sparingly is soluble in water yet this solution is found to dissolve calculi out of the body This is the principal ingredient in the Nostrum of Mrs. Stevens sold to the british government She began with Egg shells but finding them too caustic she added soap & lime water has been extensively used and is found most beneficial in nephritic calculi I have never known the article used in large quantities perhaps never shall as the Alkalies are so much better — Magnesia This Article was introduced by Black and it has been very extensively employed in calculus cases he believes no Medy. — capable of Introduction into the body so as to dissolve the stone he therefore set out to discover some Medy. to prevent the formation of the stone He instituted a number of comparative experiments between the Alkalies & magnesia and found the latter in Nephritic calculi

and Gouty cases of most benefit. The common cases of calculi differ from those cases where there is an excess of uric acid and a discharge of red sand the latter persons are seldom found affected with stone Dr. Aikin relates that in an Hospital for gouty patients principally not one case of stone occurred. The Magnesia though proper in the latter cases is improper in pure calculus.

Acids. Carbonic This Article has been employed as a Lithontriptic Percival and others conceived it capable of entering the urine and dissolving the stone as Quietly however detected fixed air in the urine of persons not using the carbonic acid I doubt whether the conclusion of Percival be correct But whatever best of all Percivals experienced on the body has found it of benefit A lad about 14 years of age came to me with a gravelly complaint which he had had 2 or 3 years I directed him to drink seltzer water 3 or 4 times a day in 48 hours he voided 42 calculi

The Nitric and Muriatic Acids have been introduced into practice by Copeland he relates two cases in which he says the stone was dissolved A very bold Assertion The patient took in one case 30 drops of muriatic acid 3 times a day gradually increasing the dose In the second 40 drops of dilute Nitric acid were taken every 2 hours the dose being gradually increased

In both cases there was he says a profuse discharge of calculus sediment. When the mineral acids are employed as antilithics it is necessary to administer opii to relieve pain and the costiveness is to be obviated by occasionally purging. I think the castor oil best adapted for this purpose. Copland found spirits and water the best remedy to relieve the effects of the acid upon the stomach. The Mode I have now considered I conceive are all useful in correcting the diathesis upon which the formation of the stone depends. Among the modes recommended for relieving the symptoms of calculi are the Astringents & Bitters. Physicians have not been little struggled to explain the modes operandi of these articles. Cullen supposes their effects to depend upon a power which he supposes these articles to possess of absorbing acids. We consider this theory visionary. Waller supposed them to act by depriving the stone of its mucus. The tonic powers of the articles have been supposed to be the means by which they do good which I conceive to be probable. Notwithstanding Dr. Barton's opinion, calculus is very generally connected with dyspepsia. Probably by relieving this they may have an effect on the calculus though they do not dissolve them.

Uva Ursi Folia. Indigenous. It does not effect the heart and arteries at least to any perceptible degree. Fermian gave 3ss and it occasioned nausea. I conceive the Medium Dose to be from my own experience and

that of my medical friends about ʒ ss of the powdered leaves. Barton who appeared fond of small doses gave from 5 to 8 gr Sauvages gave ʒ ij Some writers have conceived the stone to be dissolved by this Mde but this is not true the Mde however greatly relieves the stem. Servias has employed it beneficially in Nephritis in the dose of 5 gr and a half a gr of Opii I think the caution of premising V.S before using uva ursi is less important than in the use of any tonic The Ulceration of the kidneys & bladder Dr. Glaen has employed the remedy he says with benefit I suspect he means the irritable bladder of late writers I think the uva ursi to succeed as well as any other remedy I have never trusted it alone In bloody urine in retention of the bladder in Diuria Though Physicians are very vague in the diseases to which they have attached their application it has been employed with benefit In Leucorrhoea I have heard much but seen little of its effects frequently in Gonorrhoea Stricture and in this disease a vitiated state of the menses are at the bottom of the disease and require to be ~~moved~~ remedied before the effection can be cured a late writer has recommended the uva ursi in consumption connected with diseased bladder this is a very vague mode of talking probably in hectic fever a diseased Bladder the remedy may be of benefit Pyrola Umbellatta — Dr Barton says he has ~~been~~ found ~~that~~ it has been advantageously used as an antilithic I conceive it to be ~~efficacious~~ overrated but have had very little experience with it —

Lupulus communis vel Humulus Lupulus —
The extensive use of this article in Malt Liquors should have long ago decided the antilithic properties to be but trifling it has ever been asserted by some that stone is more frequent than than persons who employ malt Liquor as a common drink but stone is as frequent in France where no Malt Liquor is employed as in those where it is used extensively The dose of the Infusion is lbss twice a day & of the saturated Tincture ℥ss Murray of Gottenberg says he does not wish to adorn the remedy with too many encomiums A sentiment which I recommend Dr Chapman says he has used the wild Carrot with advantage — The root and seeds are the parts employed the dose is not precise —

Oil of Turpentine This was first employed by Dr. Physick as an Antilithic with great benefit Dose 5 - 10 or 15 Drops 3 or 4 times a day. I think the best mode of disguising its taste is by mixing it with oil of Sassafras but any essential oil will do. It allays the pain in Nephritis and almost immediately stops the discharge of Sandy Matter per Urethra Dr Physick has always found it useful - I have also used it with success

Garlic, Alium Sativum Sydenham has employed it with benefit in Dropsy I have seen it employed without benefit at present we are unacquainted with any article that can dissolve the stone in the Body but I am not of opinion that we shall always remain without an

I now call your attention to the fact of a discharge of stone or sand per urethram being feigned by persons who would not be suspected guilty of such dissimulation or could not resort to it from interested motives/ here he relates a case which happened to a correspondent of Dr Duncans and two which occurred to himself all the subjects were females two of respectable standing in society, the other a Negro — I consider these Morbi simulati as cases of pure Hypochondriasis they may be easily detected —

Diaphoretics.

They are more suited to produce a discharge by the skin whether by Insensible or sensible perspiration they are very powerful evacuants Sanctorius says the evacuation from the skin alone in one day is equal to all others for 15 days There is doubtless some error in the calculations of Sanctorius It is now very generally believed that the degree of fever alone makes the difference between the different diaphoretics — The human Body constantly sends forth from its surface an exhalation of vapor whether this be produced by a secretory process is not determined. This vapor has been considered by many a real gas but its condensation into sweat proves this not to be the case Whether the Perspiration differs in its chemical properties

under different states of the Body is not ascertained but is very probably the case Dr Cullen supposes that all diaphoretics to act either upon the circulation in general or upon the superficial vessels increasing their Action. This explanation however I doubt. In sweating we frequently find the excretions of the skin going on and again we find the skin perfectly dry while the pulse and Arteries are beating strongly Diaphoresis must like other Actions be produced by a determination to the different organs They act upon the same principle as other depletants — 1st By diminishing the quantity of serum in the blood 2d by exciting a new Action but they also diminish the Volume of blood in the large arteries by determining it to the extreme vessels There is one thing that must be conceded to Dr Cullen that if the Perspiration be stopt by a constriction of the extreme vessels a fever may be produced and hence the diaphoretics may do good by resorting the perspiration various means may be resorted to to produce Diaphoresis as warmth exercise tubefacients, certain drinks taken into the stomach but many of these cannot be had recourse to in diseases. Whenever the human body can be placed in a lower temperature than usual there is a stoppage of the cuticular exhalation and in a high temperature and increase & hence we see that by the application of heat and a careful attention to guard against cold Diaphoresis may be produced

The kidneys and skin are the emunctories by which the excess of moisture is discharged from the system hence by drinking large quantities of water we increase both of these excretions and this cleansing up the body is generally resorted to to aid the action of other remedies of this class In cases where long continued sweating is necessary Flannel is much better than linen or Muslins The application of cold during diaphoresis is very dangerous and hence we cannot direct purging as a remedy on account of the patient exposing themselves necessarily to the cold when he gets up to evacuate his bowels After the sweating process is completed we should shift the patients bed-Linen & Clothes-sweating is a very popular remedy and very generally resorted to by persons out of the profession on the attack of diseases

If the use of Diaphoretics in diseases By continued fever as a general term is meant either the synochus or typhus of Cullen whether such diseases a pure continued fever ever occurs is doubtfull One of the most remarkable phenomena of fever is the Increased temperature of the body which must depend on diminished perspiration the Temperature sometimes runs to 109 Fahrenheit There are two circumstances in these diseases which would appear to direct the use of Diaphoretics the first is the absence of exhalation from the skin. the 2d is the paroxysms naturally going off with sweat Cullen has observed the power of perspiration in preventing the accession of Fevers & if it be only a

a slight attack the practice may answer but I caution you against trusting to this treatment in acute fevers of our country in fact it is almost impossible to excite sweating sweating in acute fevers untill V.S has been employed In remittent and Intermittent fevers Diaphoretics have been resorted too both in the accession and remission The practice is very useful - In typhus fever and those states of Fever analogous to it Diaphoretics have been resorted to These diseases very seldom occur in America when they do sweating is proper as also it is in Typhus Pneumonia. In the Phlegmasiæ sudorifics are indicated but sweating cannot be indued if the ~~skin~~ heat of the skin is above 103° and hence this must be first reduced by V.S & C & C and after these evacuations have been premised relaxing diaphoretics are to be resorted. In Rheumatism diaphoretics are proper but but are not to be resorted to untill evacuation with the lancet has been premised. In Chronic Rheumatism the more stimulating diaphoretics are to be used — After bleeding and purging in those cases of Gout where a retrocession is not feared sweating may be resorted to. In pertencal inflamation sweating is very beneficial. In hemorhage diaphoretics are doubtful remedies. In exanthemata the ancients were very fond of the diaphoretic remedies and when properly employed they are found beneficial. In profluvia the diaphoretic Medicines are to be employed —

or prohibited according to circumstances. In Catarrh as the Patient will seldom submit to confinement to bed diaphoretics are not so good more violent cases of this disease are to be treated precisely as the other inflamatory complaint & hence diaphoretics are proper after evacuations In the other pulmonary complaints in coperation with other evacuants they are to be employed In dysentery this class of Medes has long been resorted too Akenside speaks highly of their use I consider Dysentery to be a pure inflamatory fever of the Bowels and treat it accordingly To confide the cure of a case of this disease to diaphoretics alone would be improper Mosely speaks highly in favor of the Sweating remedy under every circumstance but there never was a more presumptuous dogma. Ritcher observes that the cases of Dysentery which have come under his notice were mostly of a catarrhal or rheumatic nature an observation which proves the truth of the principles on which Dr. Rush formed his Theory of the unity of disease Richter considered the secretion in the Intestines as consequence and not a cause of disease A Theory long perfectly familiar with us. In dysentery after V.S and purges of castor oil diaphoretics are to be resorted to In cholera Morbus they are employed this disease is nearly connected with Dysentery I never attempt the cure of the disease without the use of flannel clothing avoiding all exposure to cold and correcting the

and correcting the acidity of the primae viae by lime water &c In protracted cases of Cholera the diaphoretic Medes are important remedies. In all Bowel diseases the state of the skin is to be kept constantly in view. Diarhoea is very frequently as I have already observed treated by emetic which remedies I believe act by virtue of the diaphoretic properties – In Coma diaphoretics are improper but in Melancholia & Mania they are perhaps beneficial In tetanus from wounds diaphoretics are improper but in Idiopathic Tetanus I should think them proper In diabetes they have been used but form but a small part of the Treatment In America Diabetes very generally cured by very opposite remedies Dr Rush cured a patient by bleeding – Dr. Physick treat his patients after the plan of Rollo keeping in view the state of the System. He found benefit from the following prescription

℞ Uvae ursi —
Misce et fiat Pulv – 3ss 4 p. Cort Peruv. ℥j
Opii — gr ß

He directs them to drink lime water and confine them to Animal Diet In Dropsy Diaphoresis is among the remedies to be chiefly depended on It might be supposed that the evacuations by the skin would interfere with the discharge by the kidneys. But if the water is discharged it matters not in what manner it is effected. The Diaphoretics are best adapted to Dropsies after febrile diseases and where febrile symptoms are present

Particular Diaphoretics. Of Emetics as diaphoretics The preparations of Antimony used as diaphoretics are the same as those used on account of their Emetic properties but Tart Emetic has now superceded all the rest when it is prescribed as a Diaphoretic I do not here it to recommend the Nitrous powder before spoken Emet Tart and Glaubers Salts dissolved in Seltzer water is also an excellent prescription it is to be given in divided doses

Vinum Antimonii in Proper doses is likewise a very excellent diaphoretic especially for children To a very young child within the Month I would give 1 drop under 5 from 3 to 5 drops and patient from this upward - 10-15-20 or 30 drops I however prefer the wotery solution of Tart Ant. to the wine In Bilious fever and Dysentery sir John Pringle & Barton have high recommended the Ant diaphoretics In Rheumatism Ant. is an excellent sudorific The powders hinted at above & an excellent mode of giving it repeated every 2 hours The James Powder which are now acknowledged to be an Oxyd of Ant with phosphate of lime was highly spoken of There is undoubtedly a considerable difference in the action of articles of this class there is one that appears to act upon the heart and Arteries another that appears to act by relaxing the skin and a third by acting upon the secretents themselves. The application of heat to the body or by friction are among the means employed for exciting perspiration heat may be applied by confining the heat of the body or by the application of Artificial heat by confining the Patient to bed and applying hot bricks or bladders or bottles filled with hot water to the feet thighs &c (Bricks) hot wet with vinegar & wrapped in flannel I believe to be the best

or Dr. Jennings apparatus may be used. Bags of hot sand, ashes, chaff, chaffe, Straw, salt, Bran, or oats may all be used to produce the same effect viz The production of a copious sweat which is to be kept up by warm herb tea, wine whey &c. The warm bath is attended with so many inconveniences that it seldom be applied to produce diaphoresis the same may be observed by pediluvium. Cold water applied to the skin or taken into the stomach will excite perspiration but I do not recommend it to procure perspiration simply. In the Practice of the London Physicians the preparation is still extensively employed. From the results of Experiment made by Dr Kuhn on the true James Powder he asserts that it is an uncertain remedy and that all its effects may be obtained from the Emetic Tartar in proper doses. In combination with Opium the Emetic is a powerful diaphoretic resembling the dovers powder — The cases in which Antimony is contraindicated are Gouty Dispeptic cases liable to cramp of the stomach and tormina of the Bowels. Ipecacuhanna Dislike the above is a relaxing diaphoretic The dose is from 1/2 gr. to 2 or 3 gr every 3 or 4 hours In combination with Nitre I have employed it in the following proportions —

℞ Ipecac ——— gr ss
Nitre ——— gr VII

To be given for a Dose the common way of giving it is in the form of Dovers powder. the not good

The wine is a very elegant mode of giving it as a Diaphoretic The dose of the Wine is from 30 or 40 Drops to a teaspoonfull All the other emetics when taken in Nauseating doses act as Diaphoretics When the stomach is very Irritable or where we wish to avoid every depressing effect the Emetics are contra indicated

The Neutral Salts have all been employed as diaphoretics the common saline draught of Rivers promotes both the secretion of the kidneys and skin and is very grateful to the stomach It is very frequently employed in England and too much overlooked in America

To saturate decinde adde Saccharum Alba

℞ Lemon Juice — ℥ij
Carbonate Potash — ℈j
Sach Alba — ℥j
et Aqua — ℥.IV

Nitre is a useful diaphoretic but I do not ascribe all its effects in fever to its action on the skin it acts also on the other excretions In Inflamatory diseases it is certainly a valuable Med. its dose from 10 to 15 grs.
It is not necessary to particularize the several Neutral salts used as Diaphoretics all the cathartic salts when combined with Emet Tart act on the skin

Spiritus Minderesis ℞ Vinegar — ℥j
Saturate with — Carbonat Ammonia ℈j

this Med acts as an Antiphlogistic remedy and is too much Neglected in America

Opium has been inserted by Murray into the lists of diaphoretics but I would never administer it for this purpose its other properties would render it improper in common cases as a diaphoretic when given alone in large doses it produces perspiration but it acts more powerfully when combined with Emetic Tartar or Specac. By this combination says Murray we are possess'd of one of the most powerfull diaphoretics the combination is generally by combining 25 drops of Laud with 35 of Vini Antimonii. When given in the dose of 15 drops we obtain a narcotic well adapted to those cases of Phlegmasia in which we obliged to administer an opiate – Dovers powder

℞ Specac —
Opii —— aa 1 part
Sulphas potash ℥ Da.

I generally prefer the Nitrate of Potash to the sulphate 10 parts – the dose of the powder 10 grains I am not very tenacious however of this change. In different diseases there can be no doubt of the propriety of varying the formulae thus instead of the neutral salts substituting in Dysentery prepar'd Chalk. Cullens directions for exhibiting the Pulvis Pondere & see his Materia Medica Vol 2d Article Opii He directs it to be given in the morning the patient for security against colds is to be laid in Woolen and clothed with a flannel Shirt &c The powder will generally be taken more readily in Bolus

Spirit giving it in tumant fully It will be in general best to cover the Body with more bed clothes than usual especially on the feet and legs no drink should be taken untill the sweat break out — afterwards he should drink but in small quantities at first and frequently repeated herb teas (warm) and continue during the sweating. If the sweat does not extend freely to the legs and feet more covering should be put on them or Brick heates and steeps in vinegar should be put to the feet as the sweat should be carried on with as little heat as possible if the patient finds himself very warm and restless the additional covering should be gradually removed If the sweat be well borne it is of consequence to continue for sometime & always if possible for 12 hours afterwards the body should be wiped dry with warm towels and is to be put in dry flannels and Blankets he may now put out his hands and arms from under the Bed Cloathes but should continue in Bed untill next morning when they may come out of Bed and put on his linen & ordinary dress But should remain his room at least within doors the whole day or even two days afterwards carefully avoiding exposure to cold I generally direct the powders to be taken at bed time — In Intermittent Fevers the Mercury is proper — In Inflamatory ~~fevers~~ rheumatism it has been in use It never should be given in any of the Phlegmasia untill V.S. has been previous.

It was by this Mde that Dr. Brown killed himself in acute gout. In dropsy the Mde has been used but I do not expect much from it in this disease. Camphor Musk & Sulphur I do not think them of much importance as diaphoretics. Eupatorium Perfoliatum, Indigenous. This plant possesses very varied powers acting as an Emetic, Diaphoretic, Tonic &c. The leaves and stalks are the active Parts used as a strong Tea & taken warm it acts promptly as a diaphoretic. The Indians use in cure of Intermittents as an emetic in the commencement and afterwards as a Diaphoretic how far its tonic power contributes to the cure I know not not being at all desirous of imitating savage practice or using savage remedies. It has been used extensively in Intermittents in some parts of our Country and hence has received the name of ague weed – but I have no desire of seeing any other remedies used in this disease than those we now possess. In some of the pestiferous diseases I have seen it do good. Barton does not seem to value it so highly as some of his countrymen – In dropsy and in some Chronic diseases of the skin there are accounts of its having done good. I think it is a misfortune that the Article has been too highly extolled as this will lead practitioners to neglect its real value. Polygala senega as a Diaphoretic it is given in Decoction of ℥ ij of the root to ℔ j of water and ½ to be taken at a time

Millman & others speaks highly in its favor — Laurus Sassafras. The root & Bark are the parts employd in infusion this is a very popular remedy and is Diuretic & Diaphoretic it forms a very grateful addition to the Lisbon diet, drink ——

Guiacum Officinales The Wood and Gum resin This was originally brought from the West Indies a cure for the Venereal disease as an antisyphilitic it is inert. The Decoction is generally gently stimulative and Diaphoretic The decoction is now employd in chronic cases of venereal disease in combination with other remedies in the proportion of lbs of the wood to VIII lb of water boild down to 4 and drank ad libitum. The Tincture of Guiac is much used by the addition of Amonia The diaphoretic powers are improved It is employd in Chronic Rheumatism Dose from 3 to 4 ʒ many cases occur in which the Spiritus Menstruum is improper — 20 to 30 gr of the powder may be given here or in emulsion with the Yolk of an Egg as directed by Cullen Guiac is sometimes used in Gout It was found however like other specifics for this disease to fail Cullen censured this attempt to prevent an attack of the Gout by this or any other means. There is however many cases of gout accompanied with Symptoms not easily distinguished from rheumatism in these cases our remedies are valuable I have also used it in Gouty pains of the stomach in those cases

the spiritus solution was used and very probably the menstruum had its share in the ~~effect~~ cure. —

Daphne Mezereon This article has long been used as a Diaphoretic I place it here partly on account of its diaphoretic properties and partly because it is used in combination with the former Article. The dose of the Infusion is ℥ij to ℔ij of water for a dose every 2 hours It has been used in cases of Chronic Rheumatism and in the Venereal disease. The usual Mode of exhibiting the mezereon and Guiac is in a prescription resembling Diet drink (Lisbon) The Decoction of the woods of the dispensatories is equal to any mode of giving it. The Older Physicians were in the habit of adding to it Antimony and that in its crude state consequently without adding anything to its effects. The recipe I generally prefer is the following — ℞ Lig Guiac — ℥ ij
Sassafras —
Liquorice — aa ℥j
Aqua — ℔ j

That it is useful in some chronic cases of rheumatism I am persuaded In Syphylis I believe it to be Absolutely inert that is as respects any antivenereal powers Pearson of Lock Hospital speaks more favourably of it he says it has suspended some of the sequalae of the diseases though these have again returned even while the patient was taking the Article —

Savine, Dr. Chapman speaks favourably of this Article as a diaphoretic in chronic rheumatism it is found to heat the stomach when administered & sometimes to produce an Eruption on the skin.

Sialagogues.

They are those Medicines which produce an Increased secretion from the Salivary glands They have been divided into external and internal or masticatories and Sialagogues property so call'd every article even though perfectly inert as a portion of wood will produce when chewed a secretion of the saliva The Tobacco is the only proper article of the list of Masticatories I shall mention. Of the internal sialagogues the mercury is the only one given solely with the view of producing sialagogue effects. Mercury is one of the most interesting article of the Materia Medica Its chemical history ought to excite your deepest interest The diversified effects of Mercury on the system being far beyond that of any other article upon our list — Before Chemistry was a science Mercury was considered only as a poison — The Arabian Physician first used it externally — it appears first to have been given internally to the cattle to destroy worms &

afterwards in the human Body for a similar purpose Soon after this period the chemist acquired the Ascendency in Medical Science and Mercury was employ in the cure of ~~the~~ disease of every different indication. There are cases of daily occurrence which must convince every examining mind that there is much yet to be learned with respect to the properties of our Med^n. In its metallic state Mercury is perfectly inert but the this is the case with respect to the stimulant when applied to the state of vapour to the skin or is inhaled in that state it produces its specific effect. There are Morbid consequences said to result in those employed in procuring this Metal from the mines where it is found they living but a short time. Boiled in water it evidently gives it a peculiar Metallic taste. Though Mercury in its metallic state be inert yet there are a variety of Methods of rendering it active the differing in other properties all these preparations agree in producing ptyalism Salivation is very difficult of being produced in some constitutions whilst in others the contrary is the fact. The effect it produces on the Mouth especially in Children runs sometimes ~~run~~ into Mortification. A Species of Fever precedes and attends salivation. One of the Earliest symptoms of the commencing effects of the medicine upon the Mouth is a Slight tiredness of the Gums

Preparations of mercury, Plenk's Solution this is made by triturating with Mucilage of Gum Arabic The Author of this preparation speaks highly in its favour But the Blue Pill is preferable

Blue Pill made by triturating mercury with Syrup or some mucilaginous substance adding a small portion of Pulv Rhei or what I prefer Castor

PPT. Unguentum formed of Mercury triturated with lard the best is that which contains simply the Lard & Mercury without the addition of any other substance what change the Mercury undergoes in this preparation is not decided some have supposed it to be oxydated others that it is acted upon by the Sebaceous acid & others that ~~by~~ that it is merely mechanically divided - Many have supposed the effects of the preparation of mercury upon the Body to be owing merely to the Oxygen they contain - but the oxygen alone will not salivate Mercury acquires by its combination with oxygen acids & other substances still more active powers

Of Modus Operandi of Mercury The seventeenth century was ushered in by the brilliant discovery of the circulation of the Blood The reigning doctrine and this sometimes often was the Mechanical The ponderosity and minute divisibility of Mercury was supposed to render it peculiar capable of entering every vessel even even the most minute and by that means clearing out the Morbific matter (upon which they supposed it to depend)

before it & rendering the orifices of the small vessels patulous &c
Paracelsus supposes Mercury to act as an evacuant throwing
out the Morbific Matter & Cullen has only added to
the above Theory the expression of the fact that it has
a peculiar tendency to the Salivary Glands. Bell
& Swediaur have supposed that the Mercury unites with the
Venereal Virus and destroys its activity Experiment have
however shown that Mercury added to virus provided it be
not in so great a quantity as to dilute it too much does not
prevent its operation when applied to the system
Hunter considers it a general maxim that no two action
can exist in the system at the same time he therefore
supposes the Mercurial Action completely to overpower
the Venereal Action Thus substituting an action that
will speedily subside for one that will otherwise continu
ally go on increasing. This explanation in my opinion
is the only true one it has been said that Hunters dose
times is merely a combination of Stahls & others which
is certainly false If Mercury ever absorbed into the system
by the skin! In the living human Body Irritability
exists which renders it capable of taking on action when
stimulated & it possesses another Power by which this
this Action is propagated to parts remote from that primarily
acted upon called Sympathy Now whether we consider Mercury
to stimulate the skin or stomach or to enter the blood
vessels & stimulate them we must explain its action on
the other Parts upon which it operates and with which

which it does not come in contact upon the principal of sympathy we therefore conclude that no facility will be added to nor no difficulty thrown in the way of our explanation of the Modus Operandi of Mrs by allowing it admittance into the system Globules of Mercury have been said to have been found in the Bones &c. Mead Boerhave and others make this assertion though these writers cannot be supposed willfully to have misrepresented. We find men very easy to admit the the existence of a thing the presence which they have previously considered as a theory —

The Hunters, Baily & others have in vain sedulously hunted for these Globules. To ascertain whether Mercury could be detected in the Blood or secretions of persons under its action a set of Experiments where instituted by Dr. Physick but he was unable to find any trace of the article in either In the concluding observations of these details Dr. Physick has endeavoured to explain the operation of this Medc by sympathy —

The remaining preparations of Mercury are Ethiops Mineral Black Sulphuret of Mercury — dose 5 to 10 gr Cinnibar, red sulphuret vermillion this was used formerly in various Chronic diseases but now only as a fumigate Calomel This is a muriate the Calomel being at the Minimum of Oxydation it is a Cathartic and and has been mentioned already under that head In my opinion it is the most valuable of all the Mercurial preparations

To be active as a Sialagogue it must be given in the dose of 1 or 2 gr twice a day and in cases of emergencies 1/2 gr 4 times a day. The first dose in two generally purges but this effect soon stops or may be obviated by the addition of Opium In the Febrile case we give it not only to act as a Sialagogue but so as to act on all the secretions

Corrosive Sublimate This is also a muriate the metal being at the maximum of Oxydation the dose as a Sialagogue is from 1/8 to 1/6 or 1/4 of a grain It is generally used in the form of Pill The article should be well rubd up with Gum Arabic so that it may be equally distributed throughout all the Pills The Mode in an overdose Nauseates and acts as a powerfull ~~[illegible]~~ poison

Red Oxyde of Mercury is made by exposing the Metal to heat it is seldom used it acts with violence on the on the Bowels 1/6 to 1/4 gr twice a day —

Red Precipitate Red Oxyd of Mercury by Nitric Acid this preparation is more active than the other oxyde it is not much employd as a Sialagogue

Grey Oxide dose 1/12 gr twice a day —

Turpeth Mineral. Sub Sulphate of Mercury this preparation is seldom employd

White Precipitate seldom employd —

Of the use of mercury in disease —

In our short account of the history of this Mode we told you that the Arabians when the first who employd it in diseases they first employd it externally —

The European Physicians borrowed it and gradually acquired the boldness to exhibit it externally especially in Lues venerea. It was not untill the commencement of the last Century that it was employed in fever. To Chisholm is due the honour of having introduced our Merc. into notice in this class of diseases. He employed it in 1792 & 93 in yellow fever he seems to have been led to this by his success with it in a fever in which the Liver had been affected. Succeeding Physicians have confirmed Dr. Chisholms favourable reports of the effects of Mercury in the West Indies Fevers. Lind and Jackson condemned the use of Mercury in diseases of this kind. In the Yellow Fever of this City Calomel has been extensively employed. Believing this disease to be a mere modification of our epidemic I shall merely observe that the authority of all practitioners are in favour of Dr. Rush's report on this subject who is pointedly in favour of the use of the Mode when the Mercury passes off by the Bowels he employs the ointment. No Physicians in America however trusted to Calomel alone. Rush only employed it in conjunction with the Lancet. In protracted cases of the milder Bilious fever the Merc becomes necessary as a Sialagogue. In Typhus the propriety of the use of Mercury is not decided in cases of great Debility it is certain indicated. In a Typhus Epidemic that occurred in Boston Dr. Warner gave Mercury with benefit his dose was 10 to 15 gr frequently repeated

Dr. Rush has left his authority in favour of a salivation in Syphilis Nitica. In Boston I understand the Physicians are in favour of employing mercury in Cases of Sporadic Syphilis which occasionally occurs there. In the Phlegmasiæ especially chronic, mercury is serviceable we call it in these cases an alterative. It being employed so as not to excite in any degree any of the secretions. In chronic opthalmia after all the remedies have failed mercury has cured the disease. In Phrenitis after evacuation mercury ~~[illegible]~~ is of all remedies the most important. In Mania a Salivation has frequently succeeded. In pneumonia if the evacuations do not remove the disease Salivation is resort to ~~[illegible]~~ remove the cough and other symptoms. The New England Practitioner considers mercury as the best expectorant we are possessed of and when the inflammed vessels are brought to secrete the cough & can generally relieved. On the subject of consumption I have already explained my views. Mercury has been employed in this disease especially By Rush when it affects the Mouth he declares that it succeeds and has even cured the disease in its latter stages. In the Chronic cases of Pneumonia which Dr. Rush has considered Phthisis the mercury undoubtedly is an invaluable medicine but where tubercles are present it is highly improper notwithstanding my doubts as to the propriety of mercury in genuine consumption. I believe that in some cases of true consumption it is proper

In the different Cynanche it has been employed. In Cynanche Maligna it has been very generally employed my own experience in this ~~[illegible]~~ disease does not warrant a conclusion In Cynanche Trachealis Dr. Rush has used Mercury very extensively which practice has been imitated by the European Practitioners In conjunction with Vs. Venæ, Blisters &c Calomel is an excellent remedy Dr. Hughes Theory of its operation is probably a very good one. He supposes the Action of the Mercury on the Bowels and the complaints of the trachea upon the broad principle of incompatability of two Actions going on the system at once. In cases of cynanche it is to be observed are very liable to insidious remissions and those which terminate fatally are more commonly the cases which appears to be relieved and again recur than sudden original cases. Bronchotomy has been recommended as a dernier resorte in this disease I have in one case employed the remedy when the patient appeared to be in the very arms of Death and the moment the Incision was made whether by relieving spasm or from the loss of the small quantity of blood or what, the patient was relieved immediately. Purges with large doses of calomel is the best remedy in all protracted cases of coughs & catarrhs of Children In Rheumatism mercury has been tried sometimes with success sometimes without benefit. Mercury has been recommended in Syphylitic Rheumatism The common Nitrous Powder with calomel or with Cal and opium I have found of Benefit.

In Gout Mercury is not entitled to any great confidence
In Hepatitis the mercury is justly considered as a highly
useful medicine In the Acute stage use as a purge
and afterward as a Sialagogue. It is generally successful
when the organization of the liver is not entirely destroy
every attempt to the cure the disease after it has run
its course and destroys the liver must prove abortive. In
those cases where the size and hardness of the liver are
only affected or where it is affected with Tubercles the
Mercury is the remedy The only symptom that will
contraindicate the use of mercury is the ~~only~~ great
prostration of strength - Blisters where there is much
pain and inflamation are proper When ever the mer
curial action takes place previous to the commencement
of suppuration in the Liver the East Indian Practitioner
declares the cure to be effectual In Asiatics Mercury
is generally proper as an evacuant in the commence
ment of the disease and when the skin continues
yellow for any length of time a Salivation does good
Dysentery this is to be ~~treated~~ like every other case of
Billious fever most of the west India practitioners
consider mercury as an excellent remedy in this disease
In the East Indies a salivation also is recommended
In America it seldom runs on to a Chronic ~~state~~
whenever it does we should resort to a Salivation
Dr. Barton says that when it does no good for 3 or
4 Days the Mercury must be laid and this will seldom occur
occurs

In chronic Diarhoea Mercury has been found succeed when every other remedy has failed as also it has in ~~consumption~~ dysentery In Colica Pictonum Mercury has been recommended by Cluthebuck as a Sialagogue & by Clark in large doses as a purge In the Neuralgia Mercury is an invaluable remedy In Epilepsy I have tried it in one case especially with benefit The Mercury did not salivate Epilepsy sometimes arises from effusion of serum in the Brain here Mercury promises more than any other Mde from its effects of increasing absorption In Tetanus I have no confidence in any thing but Opium & Brandy in general the disease runs its course too quickly for Mercury be of benefit In the East Indies it is used after wounds to prevent Tetanus but this is not necessary in America it is here only necessary to keep up the tone of the system by diet & stimulants In hydrophobia it is useless either as a curative or as a prophylactic I have no confidence in any preventative for Hydrophobia except the knife — — —

Dr. Barton recommended Mercury in Hypochondriasis connected with Dispepsia I have no doubt of its propriety There are many other nervous diseases in which Mercury is useful & there is an excellent practice existing among Practitioners that is of trying the mercury in every disease after every remedy has failed — In Amaurosis & Deafness especially when connected with visceral obstruction

Mercury is an excellent remedy as a Sialagogue and as a purgative in mild cases In Hydrocephalus Internus which in its first stage I believe to be a febrile disease I cannot but consider the disease in its primary state as a species of Phrenitis – The termination of Inflamation (or the Mischief resulting from ~~inflamation~~ this termination) becoming here a dangerous disease itself. From the uncertainty of allow of producing absorption from the Brain it becomes of importance to prevent it from running to that extent. This is to be effected by the vigorous use of the Antiphlogistic remedies if however these be neglected or inefficient effusion takes place and now it is that mercury is indicated In the very commencement of the disease however it is to be used as a purgative – but in the second stage it is to be thrown in so speedily and in so great an amount as to produce a speedy salivation – In various diseases of the skin Mercury is proper – The Citron ointment has effect a perfect cure of the tinea capitis, tetter &c. Salivation has succeeded in many cases of these affections where every other remedy has failed In many cases of deafness a salivation has been beneficial by producing absorption of vitious matter in the Tympanum &c. and by exciting the ~~Auditory~~ ditory nerve In recent specities of the Cornea Mercury is the best remedy you can use In Cyrtitis serena it has often failed

Of the Venereal disease. It is not necessary to discuss the origin of this disease It was evidently unknown previously to the voyages of Columbus It appears in two forms Viz Gonorrhoea and Chancre or Lues I do not at this time enter into any dispute as to the Identity of these two different forms. There is no point more fully settled than this Having discussed on a former occasion the subject of Gonorrhoea I shall now proceed to the consideration of Chancre this is an ulcer occasioned by the application of venereal matter Some person are peculiarly predisposed to Chancres while others are on the contrary not easily infected Those who have short prepuces are less liable to chancre than those who have long ones This may arise from their being no lodging place for the matter and from the firmer texture of Glands acquired by exposure — Gonorrhoea occurs much more frequently than Chancre The angle of the Frenum is the most common place of the Occurrence of chancre if during coitus or from any other means the skin becomes abraided chancre is more liable to occur than otherwise The Chancre occurs sooner on the frenum and prepuce than on other parts & is later in its recurrence when it is on the common —

In 24 hours after the application of the virus chancres appears and sometimes they do not appear for several weeks the number of Chancres varies sometimes there is only one & sometimes there is several —

An itching is first felt and then sometimes excoriation & ulceration occurs but generally a small pimple occurs fill'd with matter which ulcerates a great tumefaction now takes place which gives an elevated edge to the Chancre sometimes the Inflamation becomes diffusive producing paraphymosis & phymosis the ulcer still however preserves its specific appearance The Matter from Chancre varies in Colour & consistency. It is generally small in quantity yellow and thin but at other times it is green viscid &c Sloughs sometimes form on Venereal ulcers must enlarging them and hemorhagy frequently occurs from the separation of this Slough Chancres do not generally spread rapidly but sometimes the very contrary is the fact a very great part of the Penis being destoy'd in a few days one of the most important indications in the treatment of Chancre is to prevent the contamination of the system. This is to be effected by the use of Mercury. There have existed disputes whether Chancre is to be cured by Mercury or by local applications — both will produce the effect — destroying the Chancre it is to be observed is different from curing it — The Internal use of Mercury will cure the Chancre but the cure will be tedious We should therefore conjoin the use of external and internal means sometimes Chancres are accompanied with inflamatory symptom which are to be combatted by the proper remedies for inflamation. Sometimes Tonics are indicated ..

The objection to the internal use of Mercury merely in the cure of Chancre is that it is tedious in producing the effect. The objection to the use of local remedies only is the danger of the systems having already become contaminated. Lunar Caustic & red precipitate are the best local escharotics I prefer the latter Dr Physick also prefers the latter. The cure strictly speaking of chancres by local application is by using mercurial preparations as plasters &c so as to change the character of an ulcer. When Mercury is locally applied Hunter recommends it to be mixed with mucilaginous substances in place of oily ones. Phymosis which is occasioned by an Inflamatory swelling of the Glans Penis is a great obstacle to the cure of chancre we should therefore prevent it if possible on the first appearance of inflamation by rest, cold applications and by placing the Glans Penis in an elevated position. When Phymosis has occurred the Chancre is to be treated by Injecting under the prepuce a Solution of Corrosive Sublimate sometimes Opium is added if this treatment augments the Inflamation it is to be laid aside rest & cleanliness is to be attended to or perhaps the common bread & milk Poultice with lead water will be proper they should be aided by Leeches It is however best to slit up the prepuce and lay the Chancres bare if tumefaction exists sometimes after a cold poultice is to be laid on After the cure of the chancre a ragged edge or deformed prepuce remains the operation of circumcision should be performed

The Treatment for Paraphymosis is to perform the same incision through the prepuce to relieve the stricture upon the Glans it is however more difficult there on account of the closeness with which the prepuce clasp the neck of the glans. During the local treatment of Chancres Mercury should be given it not aids the cure of the Ulcers but prevents the system from being effected. When we do not expect much Mercury will be required we administer it by the Mouth in the form of Calomel or Blue Pill Otherwise the Unguent may be employed we should continue the Mercury during the existence of a Chancre and for some time after the cure except in cases of large ulcers when we may cease when it begins to skin over the effects of Salivation in some cases is very disagreeable if then we could use the mercury so as to keep the system under its influence without affecting the Mouth it would be of great importance. I know of no test of the action of mercury except its having affected the Mouth as soon as the incipient stages of this appears we should leave off the use of the Mrc. remembering however that if we allow the system entirely recover from the Impression of the Mrc. it will become very difficult to excite the Salivation again When Gangrene occurs in Chancres hemorhagy takes place to some extent The Mercury must then be leen aside and Styptics applied as we cannot apply ligatures to the Bleeding vessels. In Women the treatment of Chancres differs but little from that of men

excepting that as applications are difficult to be kept on lotions should be used

BUBOES. They appear in various parts of the body generally the first gland in the tract of the lymphatic from the ulcer becomes affected but sometimes a remote gland Mr. Adams in his book on Morbid Poisons asserts that Buboes are never a primary symptom of Lues Venerea Buboes or swellings of the glands ~~occurring~~ occurring without chancre never being venereal and always yielding without the use of Mercury. The Lymphatic carrying the Virus (if we admit that it is absorbed) does not in general inflame - sometimes however a small hard red chord is felt running toward the Bubo which is the inflamed lymphatic In general the Buboes occur on the side corresponding with the side of the Penis on which the chancre is situated it is generally white the chancre is recent that the Buboes occurs the absorption of the matter however sometimes appear to take place sometimes previous to the formation of the Bubo the latter not appearing until the chancre is perfectly healed A Bubo begins with pain and a small tumor in the groin which gradually increases in size and at length suppurates the quantity of matter in these abscess is very great and the skin over the tumor is of a peculiar red we should attempt to discuss the bubo for this purpose the usual

means of combatting inflamation should be employ'd besides which Mercury should be rub'd upon the inside of the thigh but if this be too tedious in producing the ~~Internal~~ Mercurial Action the Mur. may be administered internal Leeches are to be applied to the tumor together with Blisters which are to be repeated frequently even though suppuration has taken place purges are to be daily ad'd and the Patient to be kept on a low diet we are not always able to prevent suppuration when this occurs it has been disputed whether the Buboe should be opened or left to break by the operation of nature we should never cut through much depth of parts at least in common cases but wait till the skin is tolerably thin in the opening of these Abscesses we may employ caustic when they are large for by this means we destroy all the excess of indurated skin after the matter is discharg'd poultice must be employ'd but if the ulcer be long healing caustic or the various applications of mercury especially red precipitate should be employ'd if the constitution suffers bark is to be employ'd Bathing either in the sea or in Artificial Salt Baths has been found beneficial If we suspect a scrofulous taint we direct cicuta with mercury ℞ Cicutæ Extract — 64 gr
Corrosive Sublimate 8 gr

Misce et fiat pillulæ 64 ——

Unless interrupted the Chancre and the ulcers from the Buboe produce constitutional symptoms of Pox. The parts first affected by the Lues are in those symptoms called secondary occur are the Throat nose tonsils & Skin Dr. Adams asserts that Mercury will not prevent the occurrence of the venereal disease though a certain cure for the disease after it is formed It will prevent the accession of the symptoms during the time the system is under the action of the Mercury but as soon as it is left off they will appear Lues Venerea generally occurs about 6 weeks after the system has been contaminated or after the Mercurial action employed for the cure of the Chancre has ceased it generally shows itself in the shape of ulcers in the throat or blotches on the skin when a venereal ulcer occurs on one tonsil it generally destroys part of it and then gradually spreads to the uvula before the other tonsils is affected The sore throat is preceded and accompanied head ache, depression fever &c When the skin is affected there is no part attack in preference to another The Blotches are sometimes elevated above the skin They do not increase in size but in number when situated on parts exposed to friction they very soon degenerate into ulcers. The course of the Venereal sore Throat & Blotches is to be arrested by the use of Mercury internally & by friction—

Nitric Acid has been found beneficial in ulcers of throat it may be used in the following Formula

℞ Acidum Nitricum
Gum Arabae aa. ʒ ij
Aqua ——— ℥ vi

Misce et ~~fiat~~ Capiat bock pro dose

the time the Mercury must be given and the quantity necessary must be decided by the circumstances of the case Caustic is many cases necessary a local application to ulcers in the throat. The vegetable caustic is the best especially for ulcers deep seated because we can immediately Neutralize the Alkali by common vinegar and thus convert it into an Innocent Neutral salt. The diet of the patient is with the venereal disease is to be regulated by the circumstances of the case. The secondary stage of Lues is that in which the bones fasciae & tendens periosteum is affected. If the first order of part as the skin throat &c be affected by a previous chance there is no security against the symptoms of the second stage Mr. Hunter denies that Venereal poison produces constitutional symptoms like other poisons but notwithstanding the mercury must be so administered as to put the whole system under its influence Friction in this case the best as the long use of Mercury by the mouth will be apt to destroy the tone of the stomach In Case of Bodes &c there is no little or no Local treatment necessary —

but where there is great pain in the part it may be relieved by an Incision or by Blisters When a bone suppurates we should make an incision and if the bone be carious we should wait untill it becomes loose & remove the scale Of the Morbid effects of Mercury — All Mdc are to be considered as producing a morbid state of the system in a limited extent it is by this that they effect the cure of the disease The effects of Mercury however as a Sialagogue are permanent than those of any other Mdc and from the ~~variable~~ variable effects of the Medicine it requires great caution in its administration a Single grain has effected a Salivation while in other cases no quantity will effect it During salivation the cheek & tongue swells greatly and in some cases to such an extent as to prevent deglutition I have known the lower jaw luxated from a Salivation Gangrene has occasionally taken place and the whole cheek has sloughed (I never saw this happen in persons over 14 years of age) the Gum ulcerates the Alveolar processes becomes carious, hectic fever ensues, and finally death There is no wonder then that Mercury is so unpopular in practice In certain cases where death is inevitable if some violent remedy be not employed we are certainly warranted in carrying the Mdc to such an extent as to endanger the ensuing of these effects A remedy capable of stopping the progress of the Mercurial action is much wanted —

Sulphur has been much used and also several other evacuants - but Opium is considered the best we can use I believe the carefull removal of the remote cause by the warm Bath and exposure to dry & cold air is the best prescription Many other effects than those detaild have been ascribed to Mercury by the late writers In some cases Mr Hunter considers the Mercury as ceasing to act as a remedy and producing a kind of hectic fever with small frequent irregular pulse depression of strength &c A disease sometimes is produced which has been named Erythismus Mercurialis by Pearson this latter as will appear by examining Mr. Pearsons account of it & the Hectic fever of Mr. Hunter are the same disease - I believe the disease to be very uncommon in America Pearson orders the Mercury to be laid aside when this occurs and the patient to use exercise in the Cold Air without fatiguing himself After ten days the Mercury may be again resumed When the disease is once subsided he says it is not likely again to recur You should not therefore be frightd from the use of the only Medc. capable of curing the Venereal disease When a Man is about to be taken by the Erythismus (according to Mr. Pearson) he feels some pain and itching about the scrotum and upper part of the thigh with some redness

the lower extremities are always affected before the upper ones. The redness which strongly resembles the Erysipelatous inflamation gradually extends over the Body It is a vesicular disease and when these break an ichorous discharge takes place which excoriates the surrounding parts and adds greatly to the Patients sufferings the cure is to be conducted by laying aside the Mercury by using Antimonials lenitive purgatives, Opium &c For a More Minute Account see Pearson I have seen but 2 Cases of this affection and therefore conceive it to be a rare a disease but unfortunately an opinion is gaining ground that the mercury produces morbid consequences much more frequently than was formerly supposed Matthias asserts that Mercury sometimes ceases to be a remedy and produces a specific morbid effect which is regular in its progress and effects and is different from every other disease except in its first symptoms and seat in which it strongly resembles the venereal disease I consider Matthias Book to be the means of doing — to have done already a great Injury — by shaking our confidence in the only sure remedy for venereal disease and further by rendering an erroneous opinion probable that the real venereal disease is less frequent than has generally been supposed One would imagine that the preva-

question would be easily settled and many experiments may be related which will all prove that Mercury never produces a disease at all like the Venereal disease I have known Patients kept for years under its influence without its producing any effect resembling in the remote degree the symptoms of Lues Did any person ever witness a Chancre or a Bubo produced by the application of Mercury without at some period the application of venereal Matter The explanation of Hunter on this subject as already related is I conceive the most true & simple viz That Mercury sometimes acts as a Poison producing a species of Hectic Fever The cure of Chancre as well as Bubo may be suddenly arrested by many circumstances as a vitiated Air the occurrence of Dyspeptic Patients or even the mercurial disease the ulcers may become even enlarged but are we to call this a Mercurial sore when it was primarily produced by Venereal virus — The same observation may be applied to all the other symptoms of the venereal disease All I shall observe now is that if mercury disagrees with the stomach or constitution it must be laid aside but the moment the Irritation ceases the Mercury must be again resorted to as there is no other remedy that will cure the disease and every thing that tends —

to shake our confidence in Mercury as a cure for Lues Venerea is pernicious in the highest degree It has as has been already been observed & asserted that the Venereal disease is less frequent than has been supposed ulcers it is true occurs on the genitals and that after a suspicious connexion which are very doubtful whether they are venereal or not Now the only inconvenience which we subject our patient to is by concluding them to be venereal is the salivation or Mercurial action while at the same time all doubts are done away But on the contrary a very dangerous mistake would be made where we to conclude a chancre to be a simple ulcer and not venereal or we should lay our Patient open to the danger of a constitutional disease There sometimes occurs a string or collection of small vesicles upon the Epithelium of the glands generally upon the Corona Glandis these are filled with a thin straw colour pus The treatment is to puncture the vesicles wash the head of the Penis with brandy and water after the cicatrix begins to be formed & with water previously This disease is easily distinguish from chancre by more inspection Observations on the proper administration of Mercury "I am by no means convinced that the saline preparation of mercury are more liable to

produce fever than the others as stated by Mat
thias Calomel is my favorite & next the blue pill
Corrosive sublimate I never use except in old cases
and then always in combination with some nar
cotic as Opium It has been lately recommended
by a Mr. Adsington in the cure of Gonorhoea
but I have doubts of the accuracy of his account
2d. The simple ointment made from the lard
and metal without any other addition is the next
most important part of the mercurial course it
should be well rubb'd in on the thigh by the fever
The rubbing the ointment well in is of great importance
3d. The Patient under a mercurial course should be confin'd
to the house and kept from exposure to the cold
4th. The Blue pill may be us'd when calomel affects the Bowels
5th. The use of Mercurial fumigations has been lately re
vived by Mr. Abernethy who has invented an apparatus
to confine the fumes to the body It was found on the con
tinent to be ineffectual to the cure of the disease but
the fumes of cinnabar applied to the mercurial ulcers
of even the throat still remains a common practice
It is of singular efficacy in these cases as a local remedy
and deserves our confidence
6th. Mr. Blair has stated that rubbing calomel or mercury
upon the Gums will produce salivation - useful in this
way as a local remedy only
7th When the disease remains stationary we should examine
whether this be the effect of Dyspepsia &c and if so the
mercury should be laid aside and mild ointment applied
to the sores

Emenagogues —

These constitute a class of Medicines supposed to excite the discharge of the Menstrual flux not only when suspended but after it has appeared but also when they fail to appear at a proper age. Doubts have arisen about whether or not we have any such Medicines from the uncertainty of their affecting the above indication we certainly have They do not act directly upon the Uterus but by combatting the Morbid state of the system on which the suppression depends Physicians have here in fact too much overlooked the nature of the disease they have to heal I shall not enter into any consideration of the Physiology of the uterus but content myself with observing that the menses are the product of a secretion as was proven by Hunter.

Of Amenorrhoea including both retention (when the menses do not appear at puberty) and suppression (when it ceases to appear at the stationary period the cessation not arising from pregnancy lactation &c) much diversity exists in different climates constitutions as to the stated period at which the menses occur When they do not occur at the age of 17 yrs and the symptoms of Chlorosis are present Viz Appetite depraved eraving chalk Plaister &c the countenance yellow Oedema of the Legs palpitations &c we may conclude the case to be a retention of the menses to depend on a diseased state of the Ovaries Dr. Cullen supposes

While Hamilton refers it to a depraved state of the Alimentary canal. From my experience I cannot decide between the two professors I shall only make two observations viz 1st. That dissections seem to terminate in favor of Dr. Cullens Theory 2d. That the Practice of Hamilton is much better than his Theory — In this species of retaindmenses we are therefore to consider purgatives as the best emenagogues if indicated by the symptoms & afterwards Tonics But sometimes it is necessary to commence with an invigorating plan of treatment Exercise in the open air or on Horseback Cherwise Tonics &c. Emetics have been found beneficial The warm & cold bath have both been employed Pedluvium and last of all though not least Motherwort The various accessory symptoms are to be combatted by Mses suited to them Removal to a warm climate has been successful when other means have failed Suppression of the Menses has been cured by all the emenagogues This disease may be occasioned by a variety of causes generally expensive to cold anxiety of mind are the causes from which it arises and when the system is disordered the menses like other secretions becomes suppressed Physicians have erroneously considered the suppression of the Menses to be a consequence of a symptom of the morbid state of the system. When the suppression occurs from cold fever generally attends and the remedies for fever catarrh &c are called for Dr. Rush from generally finding it connected with a febrile pulse & calls it the emenorhagic state of fever

When the suppression is attended with or connected with other diseases these are to be primarily attended too It is at the same time frequently necessary to use some of the Articles of the class of Emenagogues

Of Particular Emenagogues These are various and attention to the state of the system to which they are adapted is to be observed some are Purgative some stimulent &c Aloes this is a Powerful emenagogue or Purgative and from the use of Purgatives being indicated in Amenorhoea and from its being better adapted to stimulate the rectum than the others it is frequently employd in conjunction with Tonics &c Hoopers Pill which is a common prescription of this kind is made as follows

℞ Sulph Ferri — ℥ss
Pulvis Jalap ℥j
Gum Myrh ℥j
Sacra pieres ℥ss

Calomel has long been employd in conjunction with the above Pills. Hellebore has also been employd in the form of Tinctura Melampodium

℞ Helleborus Niger — ℥IV
Cochineal — ℥ss
Alkohol — lbiss

Dose 30 drops a Day

This Article has been very long and generally employd Dr Cullen does not think much of it but it has lately gaind much credit Dr. Physick, Barton & Chesnuts are partial to it the late

employs it in the dose of 30 drops a day continued 2 or 3 days before the menses are expected if does not produce an effect in this dose he raises it to 60 Drops or a Tea spoonfull a day at the same time he employs the semicupium and friction to the lower extremities

Guiacum Dr. Dewees became dissatisfied from frequently failing with the usual emenagogues he tried the Tinc of Guiac in the dose of a Teaspoonfull and speaks of it in the highest terms in my hands and in those of Dr. Physick it has always failed Seneka has been introduced into practice as an emenagogue by Dr. Hartshorn of this city Dr. Chapman speaks highly in its favour it is given in Decoction ℞ of Seneka to ℔ij of water boil to ⅓ Dose ℥ij ⅳ in the course of the day Chapman has given it in the dose of ℥ij every 2 hours I have failed as well as many of my medical friends in its employment It is no doubt however an emenagogue well deserving your notice Ergot I have used this Article in three instances it succeeded but in one I think if it succeeds even in this number of cases it is a valuable article Dose 15 gr in Powder or it may be exhibited in Decoction What particular cases it will succeed in I know not

Savine This is a powerfull stimulant it is said to have a specific effect on the Uterus Home recommends it in ~~this~~ Dose of ℥ss twice a day

The time of total cessation of the Menses is generally of great importance to females The system is generally found in a plethoric state at this time disposing to inflamatory diseases this is to be corrected by a careful low diet & purging and a carefull attention to avoid costiveness at the period of the cessation of the Menses which are apt to be formed on the legs these have been directed to be treated as drains but I believe less disagreeable evacuations as purges will be effective

Anthelmintics

These constitutes a list of Med.s which are used to discharge worms which infest the Alimentary canal In the human stomach many animalcules found some real worms others the Larvae of insects which have evidently been swallowed with our food The Worms of the Intestines are various in kind & situation there are 3 species of round worm and 1 of flat of the kind 1st Lumbricoidie (the ascaris Lumbricoides of Linnaeus) for a lengtime this worm was supposed the same as the earth worm which however is not correct the animal does not move in the same manner as the earth worm by shortning itself when first discharged these worms are semitransparent they are rarely found in the Large Intestines

2d Ascari Lumbricalis Ascarides or Mawworm
The Body of this species is about 1/3 the length
of the Animal the rest being a tail They are gen-
erally found in the large Intestines and particularly
in Children They occur in great number
3d The Tricuba This is rare I never saw it
The Tinea and cucurbitinian which only differs
in length are the flat worms It is a Hermaphrode
its length is sometimes very great extending frequently
50 feet This worm has been found in the Body of
Dead Born foetus Worms have been found in
various animals beside Man As a cause of discom
they have always drawn the attention of Physi-
cians, They abound in the Bowels of weakly Chil
dren Accompanied with the following symptom
Paleness of countenance livid circle round the eyes
itching at the Anus pain in the Bowels grinding
of the Teeth Starting in the Sleep foetor of
the Breath Dr Horne says he has found
an invariable diagnostic symptom of the
presence of worms is an Oedematous swel-
ling of the upper lip and Alae nasi but I have
not found this to be the case Epilepsy Mania
Hydrocephalus and blindness have all been occas-
ioned by worms of which latter affection a case
occurred to myself I have known a patient with
all the symptoms of the second stage of Hydrocephalus

cured by a copious discharge of Lumbricoides per Anum Dr. Wistar informed me of one case of Melancholia resulting from worms which was cured by their discharge The Febris Verminosa nosologicae I may have met with but acknowledge my inability of distinguishing it from fever of other causes. An opinion has sometime been prevalent that worms are useful tenants in the human Body acting as scavinger and Dr. Rush asks if their total absence be not the cause sometimes of disease. That worms may exist in the bowels without doing good is evident from the numbers which sometimes accumulate To expel them however as soon as possible is the duty of the Physician for though I do not ascribe all the diseases of children to the existence of worms yet their presence aggravates and conducts those which result from other causes to an unfavourable termination Many of the Anthelmintics belongs to the class of purgatives Emetics have occasionally evacuated worms by the Mouth. There are others remedies which act by destroying the life of the worms Some of these act mechanically others by their poisonous properties. The Cathartic Anthelmintics are the most powerfull calomel has long been employd as an Anthelmintic it should be given in large doses enough to produce its full

cathartic effect to a child 4 or 5 years old is 5 or 6 gr at night if it does not speedily operate to be followed by Senna tea in the Morning The present fashionable Anthelmintic is 3 gr of calomel to 1 gr of Sulph Lime for three successive mornings to be by a purge of Rhubarb

Chenapodium Anthelminticum. The Jerusalem Oak Seeds and leaves these are to be made into a tea with sugar &c and given to children 3 successive days and then followed by a cathartic the same to be repeated untill the worms are discharged this has long been employed as an Anthelmintic but Oil has been lately obtained from the plant which is an excelent anthelmintic in the dose of 3 drops for an infant the dose to be gradually increased for older patients say from 6 to 10 drops for patients from 3 to 6 years old The same dose sufficient for an adult The seed is sometimes employed in powder

Spigelia Marylandica The vermifuge properties of the plant resides in every part of the plant it is generally given in infusion or Decoction — Decoction ℥j to lb j of water boiled to ½ very alarming symptoms have sometimes arisen from the use of this Med. some Physicians have referd the deliterious effects to the plant itself others to a plant which grows near the spigelia & is sometimes with it

I conceive that they generall arise from the Spigelia which is nearly allied to the narcotics in properties The plant sometimes purges but Dr Darwin who makes the above observations says he prefers administering calomel or Rhubarb after it to produce an evacuation Dr Home declares the Spigelia to produce no bad effects upon the whole I think that the Mr should be administered in combination with a purgative as Senna &c Mr Lehman a druggist of this city vends a nostrum against worms composed of equal parts of Senna and Spigelia I have found the article to produce vomiting in this form equally as by itself Melia Azedarach This Article is possessed of Narcotic effects like the Spigelia many respectable practitioners think more highly of the Melia than I do It is employed in Decoction Dose a Tea cup full There mention many other vegetable anthelmintics but I am not found of such extensive lists of articles the efficacy of which is uncertain I shall only here mention the Hellebous Foetidus and the Geoffry Inermis both of which have been extolled as anthelmintic

Of the Vermifuge Medicines from the Mineral kingdom I now feel myself justified in enumerating among the Anthelmintics this article ℞ Carb Fer ℥ij
Sulph Cu ℥j
Divide in to ℞ powders Pulv.

Dr. Rush and Dr. Thatcher both speak favourably of this Article

Salt Murias Soda destroys the worms readily out of the Body and has also been found a favourable internal remedy Dose ℥ss in the morning Dr. Rush disguised it with Cochineal Dr. Thatcher administers it in Molasses The above remedies are generally employd in cases of lumbricoides I shall now proceed to speak of Ascarides I have a patient labouring under Ascarides who experiences no other inconvenience than Itching about the Anus Mania and Epilepsy have certainly occasionally resulted from the presence of worms (ascarides) Purging Mx. very readily relieve the symptoms and produce a discharge of worms -

Tierra Pira in the form of ℥j to lbj of Brandy a tablespoonfull for a dose is frequently employd for this Purpose

Castor Oil has also been employd. When tenesmus is distressing Emollient Clysters have been injectd Dr. Hebberter has recommended as a remedy for Ascarides the Tobacco Injection. Camphor Tea made by moistning Camphor with Spirits & dissolving it in Water (boiling) for a Clyster has been employd The various Bitters have been used Injections of Assafoetida & Aloes the different mercurial preparations hepar sulphuris Murias Sodae oil of Turpentine should in obstinate cases be employd in succession

Of Tenia The symptoms denoting the presence of Tenia differ little from those of the other species except in a gnawing pain in the stomach All the afore mentioned remedies have been here employed but the Mercurials are particularly recommended Iron is a very excellent Medicine I have employed the Iron filings in a case of Tenia with benefit dose a teaspoonfull for a child. Tin granular and filings have also been recommended dose ½ which should be followed by a Cathartic This Medicine has been said not to act Mechanically In Scotland wine boil in pewter vessels has been found beneficial Dr. Fisher employs an amalgam of tin and Mercury in the dose of 10 to 15gr in powder to be followed by a purge Few Vegetable Anthelmintics are adapted to this species — The Last Medicine that I shall speak of is the Cowage the stiff hairs which cover the pods are the parts used This Medicine acts mechanically one would naturally suppose they specula would irritate the Intestinal canal as well as the worms but experience proves that this is not the case as the primae Viae are defended by their Mucus a table spoonfull is a dose for an adult but it is not sufficient that it destroy the worms but prevent their reproduction this may be effected by the use of lime water Chely bearers the Bitter Tonics and what ever contributes to the health & restoration of the Patient

Stimulants.

The Stimulants are devided into two species viz Diffusible and Permanent The First of the diffusible stimuli I shall speak of is the Volatile Alkali or more properly speaking the carbonate of Ammonia for in the language of the shops they are both confounded It is principal in the Low nervous Fevers they are useful in the Beginning of the real Typhus there is generally some increased if not Inflamatory action here as I showed you in a former lecture this tendency is in admissible recourse must be had to purging but after the disease has progressed & the bilious tendency and other symptoms marking the low state if have taken place the volatile alkali together with good Madeira wine should be administered ℥j every 2 or 3 hours is the ordinary dose but I have given ℥ss every half hour A case which had fully shown the importance of the Vol Alkali in the Low State of Typhus fever the Student of Med. a few years since while attending the medical lectures in this City was taken with the Typhus Fever and his case became almost hopeless he was finally

In every case when I have used it the Patient has been relieved and if persevered in it ultimately effect a cure It has also been a usefull remedy in the hands of some in those cases brought on by drunkenness A few drops of the Watery solution of Vol Alkali has been found serviceable in Cardialgia on the following formulae

℞ Aqua Amonia –
Calcd. Magnesia aa ℥ij
Cinamon Water ℥ij
Common Do ℥vj

of this a Table spoonfull is a dose. This formulae is excellent in that Gastric affection known by the name of the sick Headach If those who are subject to this Disease will make use of this recipe after each meal it will generall prevent the disease It will when taken for a week or two effect a permanent cure It is a good remedy in Gout in Indigestion Flatulency & Cardialgia In Dysentery Carb of Amonia has acquired some reputation in this disease it is given in small doses so as to determine to the surface it has also been usefull in in Chronic Diarrhea with long protracted debility of the Bowels & when brought on by Debauchery & intemperance

In the class nervous perhaps there is not a disease in which this Med. is not usefull but in those diseases it cannot be ~~attended~~ depended too upon to effect a cure it is only a Palliative It is exceedingly extolled in France as a remedy in Apoplexy I do not repose much confidence in it in this disease except in cases where it arises from gastric Affections It is a usefull remedy in those cases of Rheumatism of long standing which resemble Palsy I have done good with it in these cases in the Alms house of this City From my own knowledge I have nothing to say of this Med. in Dropsy but it is said to be by those who have tried it a usefull remedy

The Carbonate of Ammonia is said to be a better remedy than Opium or Camphor in that disease which proceeds from Drinking to excess It has been used in Cancer and is said to have cured that disease & Also in Scrophulous cases approaching the Nature of cancer it is said to have been successfully employd This Med. has been successfully exhibited as an Antidote to the bites of venemous Animals & reptiles in some parts of the United States & Also in the West Indies Dr Ramsey of Charleston in South Carolina

has related a case of this kind in which the Mde was successfully employed it should be taken internally in large doses & the part affected should be bathed with a solution of it I have used it in allaying the pain and inflammation caused by the sting of Insects as the Wasp and Bee the common hartshorn is perhaps as good a remedy whilst it is highly stimulating it raises action or if you please excitement & produces healthy action

The ~~most~~ next stimulant we shall speak of is Camphor It is a peculiar principle of Vegetable composition It is contained in small quantities in Rosemary Sage and other Aromatics It is procured in abundant quantities from Japan from a plant which grows in that Country It is procured in this Country by Sublimation It is hardly soluble in Water tho' it is completely in Alkohol Ether, Oils & lastly in Milk From these Solutions It is precipitated by the Addition of water Doubts have long been entertained as to its principle Medical qualities It was formerly and is still considered by some as a Sedative but there is no Mde that more completely displays a Stimulating Power

Its Stimulating powers has been completely proven by Dr. Alexander & Other Europee Physicians & By Dr. Barton of this City By experiments on Vegitables the Inferior Animals and the human species In small doses it increases excitement But pushed further it induces convulsion & Death In every febrile case it has been resorted too with advantage It has by many been resorted too by with more confidence than too Opium as being preferable My own experience will not enable me to determine between the merits of those two Rx no doubt they are both well adapted to the Low state of Fever - In Typhus Fever after it has continued 4 or 5 days if the system requires stimuli we should Alternate our remedies giving camphor Opii & Vol Alkali The following is a good formulae

Opii ℞

Ipecacuhanna aa grs 6

Camphor — grs XX

Make into 6 powders or pills one of which show be taken every 2 or 3 hours or oftener if symptoms require it this produces a moisture & relieve nervous symptoms In small pox it is said to be of service for the maturation of the pustules It is said by Boyenkian by that if an Ointment containing camphor is spread over any part

it prevents the pustules from approaching on that part Many different opinions have been maintained respecting puerperal fever and some have been in the habit of employing active stimulants in this disease my opinion is that the disease has its commencement in the Uterus and frequently from the want of proper attention at the time parturition the inflamation gradually extends to the abdominal viscera & to the Peritoneum the same remedies should be used here as for Inflamation in general but perhaps when the inflamatory symptoms subside Camphor as a stimulant may be a usefull remedy

In Chronic diseases the use of Ardent Spirits are are questionably. You should be very careful in prescribing them in Dropsy Dyspepsia &c If the Patient has been accustom to the use of it and will have it or the circumstances demand it in Dyspepsia it should be limit to a very small dose which is on no account to be exceeded All kinds of Strong drinks are very dangerous in these cases.

In Phlegmasia they are generally injurious in retrocedent Gout they are however sometimes useful Aether is formd By a Distillation of Alkohol and an Acid its effects much like the Alkohol

Sulphuric Aether this is formd By distilling alkohol and Sulphuric Acid and if any excess of Acid remain saturate it with alkohol and distil it again this is a Stimulous highly diffusible it produces intoxication a warmth and glow &c its operation is very prompt and transient. It is adapted to the same cases as the Alkohol - as a Stimulant but not as a Tonic the dose is from 20 drops to ʒj or ʒfs it is prepard with other Medicines so as to act less powerfull and be given more easely. The Anodyne Liquor of Hoffman which is made by mixing together Aether and Oil of Wine the dose is ʒj this is adapted to Spasmodic affections not so volatile as Aether and may be taken in a lump of Sugar

Oil of Turpentine this is a Stimulant taken into the Stomach it produces warmth and powerfully

excites the system The Dose is ℥j In the low state of Yellow fever and in Typhus fever in their very low stages this Medc is better than any other Honey be beat up with the Yolk of an egg or sweet oil still its taste is some what disagreeable This is best disguised by the oil of Sassafras In spasmodic Affections of the Bowels it is useful as a Glyster In Epilepsy it has been recommended In those cases arising from Worms it has undoubtedly done good but it has lately been said to cure the disease when it does not arise from this cause by its action on the Stomach

Capsicum. This differs very little from the other spices they are all stimulants but this is the best It is much used in the practice of the West Indies it is much better suited to their diseases than it is to ours Its effects are purely stimulating without Narcotic Powers It warms the Stomach increases the Circulation and excites the system generally It is usefull in some cases of Dyspepsia I have used it in some cases with advantage as a palliative the permanent cure depends upon restoring tone to the Stomach In Intermittents I have used it with advantage In Combination with Sulph of copper it is usefu ℞ Capsicum 5 gr } 1 Pill
Sulph Cuprum 1/8 }

In Yellow Fever this is usefull in the latter stages

Doctor Wright says he has cured it after the Black vomit has commenced In this Country there are but few well attested cases of recovery after the Black vomit The dose is from 5 to 10 gr It has lately been much employd in the Southern States in Cynanche Maligna After the use of Emetics it is used as a gargle as follows ℞ Capsicum ——— 2 Tablespoon
Murias Sodae — 1 ~~Do Murias Sodae~~
Aqua bull — 1 lb
Vinegar Boiling ℥ lb

It is said to separate the slough The capsicum varies very much in strength It is a safe Med and there is no ~~other~~ danger to be apprehended from an overdose It deserve to be more extensively employd

Piper, Nigrum black pepper It is much like the other and applicable to the same cases It is much weaker

Amomum Zingiber Ginger this Articles possess powers of a warm Stimulating nature it is useful in low Chronic cases ~~in~~ flatulency it is very useful In some Affections of the lungs it is very usefull by relieving the stomach and flatulency of the bowels

The following Recipe is very good Divide into 12 powders one to be taken every night & morning

℞ Carb Ferri 3 j
Rad Rhei 3 j
Ginger aa ℥ j

Narcotics

These are those Medicines which produce sleep They are called Narcotics and also Anodynes but improperly as they produce these effects ~~immediately~~ indirectly They are properly Hypnotics For their general effects see Dr. Murray Materia Medica —

Opium this is a gum resin it is procured from the papaverum somniferum it is brought from Egypt africa and other places it grows very well in this Country We find two kinds in the shops the Turkey & Eastindia Opium the first is the best it comes in round flat Masses Alkohol takes up more than water the solution in Alkohol is much stronger than the solution in water The narcotic principle is in the gum and resin also combined with its other powers there is an astringent property the Narcotic power resides in all the parts of the plant the extract is the best preparation it is made as other extracts are or by wounding the plant and collecting the liquids which exude As we procure it in the shops it is often adulterated It is the purest specimen of a Narcotic and it is the strongest Stimulous Thus it is both a Stimulous and a sedative according to the Manner in which it is exhibited When taken into the stomach it first increases the circulation & excites the system generally the pulse is veinously and powerfully effected By a healthy person while the pulse rises

at 70 in a minute 1gr of Opium was taken and in 6 minutes the pulse was at 74 in 10 & 15 it was 76 in an hour at 70 and it did not sink lower 2½gr were taken in half an hour the pulse was said from 70 to 80 in a minute but in an hour it had fell to 64 After taking a large dose the skin becomes warm the pulse full quick but not frequent vertigo pain in the head stupor nausea and vomiting I have seen a great many cases of attempts to commit suicide or accidentally swallowing large doses of Opium and I always find during the first half hour that the pulse is stronger full not frequent but quick This is the true Opium pulse After this temperature sinks From my own observations it does not immediately depress the system even when taken in very large doses but I have seen it when the patient has taken IV ℥ excite him highly very soon however the stupefactive stage comes on There is a case Gentlemen which requires your attention more than this where the Patient in a fit of desperation has swallowed a large quantity of Opium with the intention of committing suicide or has swallowed it accidentally I shall now speak of the proper Treatment because there has been much difference in opinion about the proper treatment and it has so happened that I have had very extensive experience in these cases The first symptoms are universal excitement

hilarity and serenity of Mind The patient appears perfectly happy and in general perfectly willing to take your med. appearing indifferent about living or Dying though they express a hope that they have accomplish their purpose sometimes they are however unwilling to take any thing then force must be used the first thing to be done is to administer Sulph of Zinci and Specac ipecacuanha these appear to me to be better adapted than any other Emetics you are to give Sulph Zinci ℥ss and Specac ℥ss and frequently repeat it every 10 minutes if this does not produce vomiting soon you must endeavour to excite it by tickling the throat and fauces with a Feather It has been reccommended to pour down diluting drink but that never should be done at this time it distends the stomach and gives a Large surface for the Opium to act upon but when the action of vomiting has commenced they may be given with advantage. The system being excited and the pulse full and strong blood is to be drawn 20, 30 or 40 ℥ at once In the next stage ~~is~~ the sedative effects are seen this arises from compression of the Brain the Patient is comatose with esterterous Breathing pulse about 30 full & quick The first thing to be done ~~is~~ if the Cause still remains is to remove it this is best done by an Instrument fitted for

this purpose by Dr. Physick which is a catheter to inject the stomach and drawout the offendingin ister but you are not to understand me that this Instrument is not to be used untill the secondstage of vomiting cannot be easily produced in the first stage this Instrument is to be used A flexible catheter to be introduced into the stomach through the mouth but if the Patient is not willing to submit there will be danger of his injuring it with his Teeth then it may be introduced through the nose water is then to be injected and sucked out again the stomach By this means to be washed outcompletely I have in several instances used this Instrument with successand think it one of the most important improvements in Medical science Whether the Opium is extracted or not the proper remedies are to be used in the Second Stage they are Brandy and the next Brandy and Water graduating the strength to the state of the patient untill at length vinegar and water is to be used External Stimulants are to be used at the same time Sinapisms to the feet and legs rubbing the Body with stimulating substances Dr Hoggin in New York has proved completelysuccessfull and if it is ever justifiable it is when used to save the persons life and when he has so nobly deserved it by attempting to destroy himself When Death affords an Opportunity of Dissection we find the stomach inflamed in spots

The effects of this Mde is very different in different persons The Largest quantity that I have known to be taken at one is 36 grains the smallest dose dose I have known to kill was ℥ss of Laudanum I have dwelt longer on this subject on account of the difference of Opium and on account of my own experience on the subject has been very extensive Large doses produce sedative effects and small doses frequently repeated produces the same and produces the same effect as ardent Spirits does all the effects of a stimulous appears every part of the system is effected The Physician should not prescribe Opium when it must be long continued if it can possibly be dispensed with for the same reason that it is dangerous to prescribe the use of ardent Spirits in these cases the same consequences result from the habitual use of Opium as from ardent Spirits. when long habituated to the use of strong stimuli the Patient system become so Irritable that the least injury proves fatal, in these cases the habit must be broken, Sometimes Spirits must be taken instead of the Opium for a short time, then Porter, this must not be long continued I think the Hops the humulus Lupulis a most excellent remedy, it has some Narcotic powers and is both a stimulant & a ~~[illegible]~~ tonic. The hop Tea is proper Coffee is sometimes useful.

The Patient is to be nourished throughout this time with a great deal of care, and the Stimuli gradually decreased. By long use of it very large doses may be taken, Dr. Menges of this City had a patient who took lbij daily. We have no Antidotes to this article the Medicine already mentioned are to be used purges are usefull in the latter Stage: its effects as a Poison are decided. It is the Magnum dei denum It is to be given 1st. to relieve pain 2d. In cases where excitement is necessary, then it is to be given in small doses and frequently 3d. To induce sleep 4th. to alleviate spasm 5th. To stop Hemorhagy It is necessary to recollect all its effects. In Continued fevers it is usefull after the inflamatory symptoms are subdued It never should be given in the first Stage even in the second stage it is an Ambiguous remedy and when there is Delirium &c it is improper It is undoubtedly both a Stimulant & a Sedative It stimulates, excites and then produces its sedative effect and procures sleep For some of the symptoms as watchfullness &c Opium and Ipecac in combination are proper but only in the second Stage. I have seen procured by a grain of Opium given before the Inflamatory symptoms were subdued. When the Patient is very weak opium must be given Delirium is very equivocal it arises from different causes when from debility it is attended with a low Mattering &c then Opium is usefull

In Diarhoea in the latter stages of yellow fever & Typhus it is proper. In Subsultus tendinum the Opium and Volatile Alkali &c and as much nourishment as the patient can take is to be given Opium in continued fevers is a very dangerous remedy and think I have mentioned every circumstance that will make it necessary to administer it in those fevers. Cases have happened where the effects of the Opium from too large a dose have appeared to cease for a time when all at once the Patient has sunk under its effect this shows the necessity of always watching the Patient for a considerable time In Intermittent Fevers it is said it was used by Galen this practice is good when the Opium is given before the cold stage or at the commencement of the Paroxysm after proper evacuations have been premised Dr. Lynn gave it in the hot stage I have done so and not found any bad consequences follow but do not think the practice a good one, I recommend the use of it in the commencement of the paroxysm; It is a practice with some to give it in Coffee, which has been thought to correct its narcotic effects also with Acids In combination with Bark it has no advantages It should not be given to the exclusion of the Bark. Dr. Physick has given it in the hot stage more frequently & has more confidence in the Mode than I have

In Billious Remittent Fever it is usefull after bleeding and other evacuations so as to subdue the Inflamatory symptoms It has been prescribd to produce sleep in febrile cases sleep cannot without great difficulty and when it is procured the Patient is disturbd with frightfull dreams and he wakes up fatigued and evidently injurd by it. Sleep in many instances is much easier procurd by the loss of a little blood; Opium is never to be usd without premising evacuations in fevers. In Phlegmasia Dan is what call particularly for Opium, when the pain is violent and the system is not much excited, Opium may be given without evacuating. In the Suppurative stage Opium is reccommended, it is undoubtedly safe and may be given before this time. In giving Opium we must compare the good effects likely to arise with the bad ones that may follow, and if we have more to hope than to fear from the remedy we should give it. The propriety of applying it externally is doubtd by some, I think some advantage may be gaind by alleviating the pain the Opium is usefull to support the system when large abscesses exists In Gangrene since the work of Mr. Pott it has gaind much credit, I do not think he has given the relative power of the two Articles with sufficient exactness I do not hesitate to recommend the Bark also except in cases of Mortification from excess of Action In surgical cases pain call for Opium In Injuries of the head you never give it because here the bad consequences to be dreade are more than the

advantages derive but in local inflamation in other Parts of the Body as in Paronychia &c the contrary is the case In Opthalmia Opium is sometimes usefull In Pneumonia copious evacuations are necessary after which Opium may be usd it relieves the pain and cough by a carefull examination of the system you may make it an expectorant There are many formulae for exhibiting this Medc as an Expectorant the following is a good one

℞ Liq Laudanum guttæ 60
Vinum Antimonium ℥j
Gum Arab ℥ij
Ol Anis gtt VI
Aqua ℥VI

A Table spoonfull to be given when necessary in all the Inflamations it may sometimes be given with advantage after proper evacuations In Chronic affections it is usefull taking care always not to produce a worse affection by prohibiting the habitual use of Opium In Inchoacedent Gout affecting the stomach Opium Brandy and all the Stimuli are to be usd in some of these cases very large doses are necessary In Cholic it is recommended it proves cathartic by relaxing spasm it should be given after bloodletting In Chronic Mania it is sometime necessary the Physick uses it in very large doses successfully Lunatics requires very large doses of this Medc. I think that in many cases of insanity it may be usd successfully

In Mania a potu it is particularly usefull —
In Tetanus from wounds it is the best if not the only remedy given in combination with Brandy they are to be given very largely. Remember it is to Tetanus from wounds that I am speaking of that affection which you find every muscle stiff and as hard as a Board For Heavens Sake Gentlemen do not mistake you are not to give it in this Manner in what is call'd Idiopathic Tetanus or that Hysteric Disease resembling Tetanus If you do you have not my authority for it It is the true Tetanus from Wounds that I mean In Hydrophobia I wish to see it more extensively employed though I believe the disease has never been cured but yet I think it worth while to try what effect would be produced by giving it in very large quantities It should be given so as to produce an effect as strong as Death —

of the Patient. In Inflamation off the viscera of the Abdomen as Liver, bowels preceded by the depleting plan In Dysentery it will alleviate pain always be aware of its stimulant power give it according to the state of the system In Hemorrhagies not connected with a state of highly increased vascular action opium is a valuable remedy by removing that state of increased irritability whence the frequency arises In Menorhagia Dr Cullen never found it usefull In Combination with acetate of lead it is much use on this as on many other hemorhagy. In Hemoptysis when the hemorhagy is caused by coughing in this it is usefull by allaying the irritation by which coughing was excited but when blood accumulates in the which excites cough and discharge takes place it is highly improper In the Exanthemata opium is employed with similar intentions and is often more peculiarly advantageous by lessening the irritation connected with the Eruption.

In Small Pox it is peculiarly usefull with this Intention after the eruption is complete where it is copious and if the comomitant fever

be of the Typhoid the same advantage is derived from it as in pure Typhus In Measles the state of the system being more purely Inflamatory it use is rather contra indicated In scarlatina not in the early stage not untill the Inflamatory symptoms have been subdued In Dysentery in form of Enema will quiet tormina - griping &c 60 gtt to 13 of Gum Arabic This I have already stated is a fever Introversa In Colic, both by mouth and by ano it sometimes purges owing to the Idiosyncracy to its antispasmodic powers flatulent Colic is relieved followed by Enemata of Olivini In Billious colic after Vs. and purging it is often usefull and in flatulency a single Clove is of sufficient In Acute Phrenitis it is inadmissible but in Mania attended with a torpid state of the brain opium is used by Dr Physick gave 27 gr a day with powerfull evacuations in a recent case of mania and cured his patient in 4 weeks In this disease large doses of remedies are always necessary In a case of insanity I have given 40 gr a day in Melancholic it is invaluable and also in Hot species of mania from intemperance In Tetanus it is the only remedy I refer to transmit considerably either a Specific

or Rheumatism and require the employment of Vg. purges, diaphoretics I do not pretend to say Opium will cure it but it will do more than any other Med. It should be given in very large doses carry it to the extent of producing stupor whatever quantity is necessary The change of pulse and narcotic effects are the coincidence of these effects In hydrophobia I am desirous of seeing the Opium carried to still greater extent and surely in this case if any should we be justified in proceeding with the use of it to a very dangerous extent. In Epilepsy opium is useful in some cases Dr. Chapman supposes it a gastric affection that this is often the case we do not deny but as it often arises from other causes, remedies acting only on the alimentary canal should invariably be unsuccessful. I have given large doses to a patient at bed time his fits coming on in the night but would not perceive it and good & harm I do not however condemn it where aura Epileptica takes place opium is serviceable a sense of coldness or actual pain are symptoms when Cullen says opium is useful In Hysteria opium is valuable but as it is often accompanied with high arterial action requires V. S. To reduce it and the low excitability. In asthma it

it is very useful even when venesection is indicated. The latter is to be premised. palpitation is frequently a symptom of dyspepsia and I have commonly used volatile Alkali with very great success with or without opium to continues a long time and we shall often be called to prescribe for it. opium will palliate but not cure In Anginapectoris small doses of Laudanum In dyspepsia it will palliate some symptoms but it often causes that disease In Syphylis it was formerly much extolled. It is a valuable medicine during during the exhibition of Mercury in cooling infusion as a gargle I might here close the account of them (diseases) but shall consider its use in surgery To relieve pain it is employed in almost every case of surgery. In Lithotomy opium mixed with conserve of roses and made into Pills Introduced into the rectum is the mode of giving it it may be given in substance dose gr
It is supposed to have a more permanent effect The pills are made by rolling the opium into small pills. I have considered this as one of the worst forms of giving it when we wish a speedy operation The powder is to be preferred to the form of pill is prepared

the powder'd opium may be made into a pill with conserve of Gum Arabic bread &c but always to be fresh prepared. Where we wish permanent operation give the opium of Pill Laudanum of ℥j ℞ Opium to 1 lb of ~~water~~ Alcohol One ounce of ~~Opium~~ Laudanum contains 28 grains of Opium, one Drachm Three & half grains and Twenty five drops Vinegar this is perhaps of equal importance with any article used Laudanum kept a considerable time the opium is deposited & supersaturated liquor is weaker the Alcohol if the bottle is uncorked the bottom is much stronger in proportion to the evaporation and deposition In those circumstances I have known 2 drops of of Laudanum produce Death Therefore be on your guard in prescribing stale Laudanum 25 drops for an adult ~~to be varied very much~~ 10 or 15 years 10 or 5 drops according to circumstances 1 gtt for a child within a year in some cases we are obliged even to give it in larger quantities when giving to children within a year 1/2 drop in a teaspoonful

In Yellow Fever at the last stage when Debility &c comes it is as proper as in the low stage of Typhus It is best to give it in combination with volatile alkali in the Yolk of an egg or other secretions articles - with Camphor Opium has been combined Dr. Dorsey gave this combination in Typhus fever given with the intention of procuring sleep but this cannot be accomplished when there is high excitement this will apply to every case where there not a high excitement In the Phlegmonic Opium being employed is from its stimulating operation more doubtfull and in any pure Inflamatory affection attended with highly increased vescular action must be very and cautious where it is given so as to determine its action to the surface of the body and produce sweat it is often advantageously employed Particularly in Rheumatism or the other disease of this order where the Inflamatory stage has subsided, Its exhibition is occasionally necessary to obviate symptoms connected with Irritation In Cephalgia and Paronychia Opium is not added by its stimulating Effect to increase the disease but to alleviate pain In phrenitis it is highly injurious depletion must in this can be carried to a high extent You have already learnd from the professor of surgery how to treat inflamation Dr. Physick & Chapman teaches you Inflamgangrene of the feet and toes of old people you have already been told by the Professor of Surgery

Mr. Pott in doing it with decided effect. In surgical cases has been ~~treated~~ directed to much of its stimulant effect in these cases. It is given in Tooth Ache and Paronychia to allay pain. In Opthalmia. In this I shall say little of its use. In the acute stage it is highly injurious, often 10 ℔ 15 may be used to relieve pain as a Collyrium. I shall speak hereafter. In Pneumonia is an excellent remedy after the Inflammatory Symptoms have been subdued it promotes expectoration if preceded by vs. you may obtain its expectorant effects. In Pleurisy after the use of the Lancet is a valuable. In Catarrh when accompanied with fever and pain in the chest is inadmissible but depleting remedies are here valuable. When cough mixtures are admissible the following is a very valuable one

℞ Tinct Opii gtt LX
Ant. Wine ℥ j or 4gr of Opium
Gum Arabic ʒ i or ℈ ʒ of Liquorice
Oil Anised gtt VI
Aqua ℥ VI
M.

Dose a Table spoonfull 3 or 4 times a day as occasions may require. Another formulae which is Derived from Dr. Fothergill

℞ Balsam Tolu Tinct
Elix Paregor aa
Dose a Table spoonfull every 3 or 4 hours

In Pertussis, will relieve irritation, but never give it in recent cases always to be preceded by Ofs &c where the Inflamatory symptoms are subdued & not till then In Pulmonary consumption in the latter stage when recovery cannot be look'd for then it is valuable when sleep is attended with frightfull dreams will allay cough &c and is in this case advantageous
In Rheumatism it is given in form of Dovers powders but will not answer in its inflamatory stage many of my patients in this stage have derived much more benefit by the use of the Tartrat as an Anodyne In chronic Rheumatism It is a valuable Medc In Syphylitic Rheumatism It is beneficial in combination with calomel so as to produce a ptyalism the opium will restrain the cathartic effects of calomel
In Gout. The same rule is applicable to this as in other inflamatory diseases In retrocedent gout Opium is usefull Brandy applied to the pit of the stomach will relieve this in nearly every case I have given to a relation of mine 1/2 ℥ of Laudanum but gentlemen do not quote my authority of giving such a dose and do not imitate me in this point commence with small doses untill you are acquaint with the habit & idiosyncrasy &c

Tinc Opii camphorate is more agreeable to taste than Laudanum I never prefer the paregoric to Laudanum 1 oz contains 2 gr The Edinbr Dispensatory 1 oz contains 8 gr this is another objection to the remedy 5 gtts within a month A vinous mixture of Laudanum is little use in this country Mr. Ware recommends it as an Collirium a watery solution is sometimes employed as an injection. The use of Opii by the stomach is precluded by nausea and other circumstances Hence use it externally or in Enemata the opii plaister is made by softening opium with spt and spread on leather. Poultices with Opii Here I have not much confidence in their preferring lead It is however useful in severe pains as in Tooth Ach hemicrania and tic Doloreux Anodyne Injections In common cases we may use Laudanum generally mixed with gum Arabic Starch & water &c For strangury succeeding Blisters and in Tremors it is very usefull In some cases we are obliged to use opium mixed with water and starch In schories of the rectum and Ulcers Sir Everard Home gives opium pills introduced into the rectum with great advantage. I have now finish

with this valuable Article.
Hyoscyamus A powerful article all parts all part have medicinal properties The extract is principally used It has long been known as a Virulent Poison The effect are very analogous to those of Opium and next to it at Article is most certain. Hypnotic The pupil of the Eye is greatly dilated by this and other Narcotics. Were I called to a patient poisoned with this I should pursue the practice pointed out in speaking of Opium especially wash it out The dose is one or two grains gradually increased It is principally used as a substitute for Opium whenever we are to avoid constipation Dr. Bancroft tried it in Mania and in one case with great effect In Epilepsy it is to be used only when Opium is contra indicated Mr. Bree recommends the squills with nitre in Asthma

℞ Extract of Hyoscyamus gr III
Fine Squills gtt X
Nitric Acid gtt VI
Water ℥ j

So far as I have seen this remedy it should be used in larger than is commonly recommended

I shall now speak of Laurus cerasus, cherry tree Laurel (Europe) this does not grow in the U.S. as the name implies bears a cherry the Leaves are the part used they have an odour slightly fragrant their taste is extremely Bitter they possess a highly narcotic quality if given in large doses it produces Death without a struggle no Inflamation is evident in the Stomach The operation say, Cullen is various Dr. Langrish tells us that 13 of the Infusion of the Leaves cerasus will occasion more violent and stronger effects than 5 or 6 will do The active principle is highly volatile Chemists have long suspected it to be the nature of the oils but it appears to be prussic Acid This is the opinion of respectable writers that this acid is essential to the Constitution of the narcotic and deliterious principle of this plant it has been observed that the odour of this Acid is similar to that of the Cherry laurel peach blossom and bitter Almond We may prepare the Acid in form of Infusion & Tincture Cataplasms of it has been recommended by Cullen as usefull in some cases of spasm &c

Dr. Landrish mentions that the powder of dried is much better and is held in greater esteem among the poor people in Intermittent fever — This is hazardous in Pulmonary Consumption it is given it reduces the the pulse similar to digitalis Dose of the Tincture is 5 gtts of Infusion I have not employed it I commence to speak next of Atropa Belladona Deadly Night shade this has long been known as an active poison a native of Europe a perennial plant the whole of the plant is active but the leaves are preferred for medicinal use as being more uniform in strength. The Berries were used as an anodyne but are now lain aside In a moderate dose belladona occasions sense of warmth followed by a diaphoresis and a disposition to sleep frequency with nausea and Head ache In large doses symptoms of intoxication vertigo sickness & thirst the pulse becomes low and feeble the pupils are dilated vision is impaired and these symptoms terminates in Convulsions coma or paralysis. Indication To remove the remote cause by giving large doses of Emetics as Sulphas Zinci or by washing out the contents of the stomach in the last stage stimulants & to rouse the symptoms

When torpour comes on By long continued use may be gradually increaid In Epilepsy 2 grains to 10 Chorea, St vit, palsy, mania in febrile arterial action but in that state of the Brain accompanied with apoplexy it cannot be admitted It is said to be good in Intermittent Fevers I use it before the Accession of the Paroxysm Dr. Cullen speaks very highly of it in Cancer He says he seen a case much amended but the Patient dreaded the effects of this Med and laid it aside (Dr Dorsey seems to discredit it) It has been used for Hydrophobia Dr. Saunders first used it for Dilating the principal in operation of the eye (congenital cataract) A Drop or two of the extract mixed with water is spread over the eye lid in 1/4 of an hour dilates the pupil, Taken Internally produces the same effect. Dose Extract of Belladona 1 to 2 grs the leaves from 1 to 3 grains

Conia Maculatum Hemlock not Indigenous in the U.S. but grows in some part of pennsyvania Virginia and it grows best in a light soil. It is also called Cicuta The Extract or leaves are used Goats eat it without impunity. It is fatal to rabbits and Geese It is said Socrates owed his Death to it produces in small doses dimness of vision and nausea In large Doses the effects as other narcotics

It has been given in Cancer in the dose of 2 gr
Expressed Juice to ℥j Baron Stork was the first
who introduced Dr Dorsey says he has used it externally
and Internally in genuine schirrous and cancer
without any good effect I have used it in scrophula
he has found it Beneficial as an alterative with Mercury
In Leprosy it has also done good I have seen a case of
scrophula of 10 yrs standing cured by cicuta and corrosive
Sublimate and cured the Patient in 3 months In
Ulcers from venereal it does a great deal of good combined
with the Salt Bath In those cases of venereal combined
with scrophulous it is to be used. In restoring indolent
tumors. In those cases of Termination of Inflamation
where a coagulable lymph is thrown out into the
cellular texture producing tumor, sometimes mis-
taken for schirrus in these cases purging. V.S.
Mercury & Cicuta are highly useful these tumors
sometimes occurs in the testicle and treated in the
same manner Genuine schirrous of the Testicle known
by the Lancinating pains. Has been given in
gangrene of the Toes of old people. I do not agree with
the professor of Surgery that -

I Believe opium as usefull as cicuta In schirrous
In Chorea St Vitis is usefull but Emetics does more
good In Mania I have seen it and without any advantage
Pulmonary consumption of the scrophulous kind
Opium is good it Alleviates pain and this can
be obtained from Opium

Externall Applications

Internal. Powder leaves and extract Dose 2 or
3 grains increased gradually to 8 grains The leaves
are to be gathered when the flowers are falling off they
should be green Extract is made by inspissating the
Juice of the leaves we should never change the particle
of any active medicine without experimenting with
it as one parcel may be much more powerfull than
another very frequently you will find one grain
equal to 10 the Leaves are to be dried before a gentle
fire and kept seclusive from light The following
is the formulae which I employ ℞ Corrosive sub 8 gr
Extt of cicuta 64 gr
made into 64 Pills one to be given morning & evening
Datura Stramonium An annual plant and
very often called Thorn apple, Stinck weed
most commonly Jamestown Weed

cattle frequently eat it with impunity on the human system it produces effects analagous to those from opium. Tetanus has been result from it its use It dilates the pupil very much the iris is almost invisible I have seen several cases of this kind in Children When large doses are taken the patient is heated similar as when opium is taken in large quantity Dr. Storck employed the extract leaves and seeds In Epilepsy In mania and some other nervous diseases Dr. Archer of Maryland observes he has given the Stramonium in epilepsy with advantage When the periods become regular He gave the seeds rubbed up with Gum Arabic in Pills of two grains every 3 or 4 hours a low diet is to be observed. N.B. when Epilepsy terminates in fatuity there is an organic affection of the Brain and no Medicine Will do good The seeds should be of a Dark colour, In Mania the Medicine was tried largely in the Pennsylvania but with little effect. In Tetanus it has been used by Dr. Simms of Georgia has reported a case cured by it I think it is by no means so good as opium he also says that he never saw the disease recover from whom N.B. has been used In Asthma it has become fashionable to smoke the

the Stramonium internally It is much less powerfull than Opium in this disease In Consumption it has been employd but it should not be preferd to opium It has been used to prevent the accession of the Paroxysm of Intermittent fever in dose of two grains. In Gutta Serena it has been used but without effect In operations of the Eye it is used to dilate the pupil externally employd Extract dose 2 grains increased slowly to 15 grains Saturated Tincture from 10, 15 to 20 drops gradually increased made by filling a quart Bottle halffull of the seeds and filling up the bottle with spirits. The leaves steepd in Brandy and applied to the pained part in Rheumatism and in gout has also been used in Burns where the ulcers are of the chronic kind In Hemorhoidal affections is beneficial in some cases Nausea and vomiting sometimes arises from the external application of Stramonium and Henbane do not constipate like opium

Nicotiana Tobacum Tobacco As a powerfull antispasmodic we resort to it in strangulated Hernia & Cholic in order to relax the stricture used as a Glyster ℥j of the leaves to lbj of

of warm Water it is dangerous it is dangerous 1/2
only to be injected at a time Dr. Dorsey has given
3/4 of a saturated infusion to a child in Tetanus
without producing any effect In New England it
has cured tetanus by Glysters Citron ointment
cures 1/2 of the herpetic diseases also butter saturated
with salt Solution of corrosive sublimate cal-
omel these are used in Tetter also an infusion
of Tobacco

Humulus Lupulus common hops. It
is given in dose of 3 grains In infusion a
Tea cup full Dr. Dorsey has cured several
cases of Mania a potu with it saturated
Tincture is also a very good preparation and
also in some instances as a Cataplasm
Nux Vomica and several other narcotics
might be mentioned but time does not per-
mit me to speak of them I shall therefore
speak next of Antispasmodics

On Antispasmodics

Spasm is an Irregular morbid action of
the Muscular fibres and those medes
which relieve it are called Antispasmodics

I do not know that we have any medicine which is entirely Antispasmodic I shall first speak of camphor Camphor is not the product exclusively of one vegetable but is contained in many plants especially those of Aromatic kind diffused through their wood or bark and is often deposited from their essential oils when these are long kept the oils of peppermint, thyme sage and several others afford it For the purpose of commerce it is obtained from a species ~~of the~~ of the Laurus the Laurus camphora a native of Japan It exists in distinct grains in the wood of the root and branches of this tree It is extracted by Sublimation the wood being exposed to heat without a quantity of water and the temperature thus communicated being sufficient to volatilize the Camphor In Europe it is purified by a second Sublimation with the addition of 1/12 of its weight of lime. Pure Camphor is colourless Semi Transparent tenacious and somewhat unctious to the touch its smell is strong and fragrant its taste is pungent & bitter, volatile, liquids dissolve it strong acids decompose it In large doses produces nausea vertigo convulsion

Death &c. of its employment in diseases of its
mode of operation we scarcely know any article
of its precise operation. In diseases is only ad-
missible as a Stimulant Article The opinion
of old Physicians that it acted as a cooling and
sedative. I have no great experience of and therefo
refer you to Cullen. In Typhoid cases where
opium and volatile Alkali In Intermittent
Fever I like many practitioners have exclu
sively trust'd to it alone but better in combin
ation with Peruvian Bark Although camp
hor does not act as an Antiseptic it is well
known that Dr Seybert's Experiments have
clearly set aside the putrefactive state of the
blood In low states of Fevers as in Jails & hospitals
it is usefull particularly in combination with
Vol Alkali and Opium In Puerperal fever
when the Typhoid state comes on it is usefull
but in all fevers in the first Stage it is in-
admissible after the use of depleting remedies
In Phlegmasia It is occasionally used but
no Physician use it in the acute stage I con-
sider ~~the~~ its a pernicious article But in a chronic
state I agree with Dr. Barton that it is a
Subsanatic and usefull by producing diaphoresis

In chronic Rheumatism it has been used both internally and externally In Epilepsy it has been used but I consider it inert
In Chorea St Viti it has also been used In Mania it has been used and tell me an article in the Materia Medica that has not been used in this disease In Puperal convulsions I must refer you to the Professor of the obstetrical chair In Strangury it will relieve and prevent it from the use of cantharides The dose of camphor is from 5 to 20 grains we may give it in larger doses I have seen it given to the extent of ʒ ij It is sometimes given in the form of Tea This is made as follows Pour a little alcohol on it that the camphor may be partially dissolved then pour boiling water on it this is a weak mode of giving it and it will relieve Strangury from Blisters It is also usefull as an embrocation ʒ j of camphor dissolved in IV ʒ of oil of Turpentine I shall next consider musk (Moschus, moschus moschiferous) The Animal which affords Musk is a native of the elevated regions of the East of Asia The Musk appears to be a peculiar secretion which is deposited

in a small sac situated high the umbilicus of the Male It is brought from China or from the Indies in small Membranous bags covered externally with coarse hair The musk within is in grains is slightly unctious of a Black colour having a Strong durable smell and a Bitter taste It yields a Part of its active matter to water by infusion by distillation the water is impregnated with its flavour Alcohol dissolves it the impurities excepted. It is a volatile Article and it said that it loses no weight of its use in disease. I have not much to say it is placed under the class Anti spasmodics Dr. Cullen supposes it a powerful Medc. In Tetanus. There is a case similar to Tetanus in which it is said occurs in drunkards and the form in which it is used is as follows

℞ Musk
Vol Alkali aa ʒj
Gum Arabica ʒj
Aqua Fontana ℥IV

Dose a Table spoonfull every hour
I think much of this prescription in this case
It is much used in the Hospital

Dr. Roe of England used it in a particular case of spasm of the throat with good effect In Gout When the stomach and intestines are in a spasmodic state I think it is beneficial In Spasmodic Asthma much benefit has resulted from its effects In Subsultus Tendinum I have already mentioned its use in this affection and think it highly usefull I have used it I have seen a slight narcotic effect from it Dose 5 to 10 grains I prefer it given in small doses frequently 5 grains once in 2 hours It may be given in form of Infusion & boles but I prefer it in the formulae already mentioned also in form of Enemata but it is so expensive that I would not advise you to use it in this way Artificial Musk has been made and it is said to be as powerfull as the genuine Mode of making it is as follows By Triturating one part of oil of amber with four of Nitrous Acid added in small portions at a time and stirring them together with a glass rod The oil is at last converted into a yellow resin having the smell of musk and is known in Germany under the name of Artificial Musk —

Castor, Castoreum, castor fibre The beaver and amphibious quadruped It is a native of the North of Europe Asia and America castor is a peculiar product collect in cells near the extremity of the rectum in this animal It is imported of a superior quality from Russia and an inferior kind from New England. The former is a dry slightly unctuous of a reddish brown colour intermixed with fibres and covered with a tough membrane it has a strong unpleasant smell and Bitter acrid taste and smells The Active matter of castor is dissolved by Alcohol proof spirit and partially by water The Tincture with Alcohol is least nauseous Cullen says it is a powerfull antispasmodic when given in large doses The Physicians in the continent of Europe give it in mania Epilepsy but I think it inefficacious Dose ℈ss to 20 grains Tinc one or 2 ʒ
Empyreumatic Oil and several others are banished from practice.

Carbonate of Amonia is so difficult to be retaind on the Stomach when added to empyreumatic oil that I prefer giving it alone

Oil of Amber I have seen it used in large doses in colic with benefit. In Gout does good As an embrocation I would not advise you to use it as it is so disagreeable use the others which I have already mentioned.

Assafoetida Ferula Assafoetida, Gum Resin This is so familiar to you all that I shall not dwell on the History of it Some use it as a substitute for Garlic In diseases we employ it In Hysteria every practitioner uses it Cullen says it relieves the paroxysm All the fœtid gums determine to the lungs Assafoetida has this effect and produce expectoration In Pleurisy and other pneumonic diseases it is useful after the acute stage is subdued In the acute state it is injurious It is best after the Antiphlogistic plan has been resorted too In Asthma it is given to meet two Indications 1st to relieve spasm 2 to relieve flatulency In Pertussis I confess I have found nothing better given in aqueous solution formulae as follows

℞ Assafoetidae ʒ ij
Aquae Rosae ℥ IV

Dose a Table spoonfull every three hours to a child 1 year old. After purging with calomel

in the first stage you may find it highly useful & does obviate the paroxysm
In Pleurisy catarrh, croup &c it is much used
Dr Rush found that to persons who took Opium & Brandy in excess it is highly useful I have found the same. The dose is from 5 to 10 grains my form of giving it is as follows
Dissolve ℈ j or ℈ ij in ℥ iv of Rose water Dose a Table spoonfull. In Glysters it is much used in this form in ascarides with benefit analogous to this Article but less is the Gum Ammoniac formulae in which it is used

℞ Gum Ammoniac ʒ j
Dissolve in Gum Arabic ℥ VIII
Vinegar of squill, ℥ ss
Laudanum gtt LX

Dose a Table spoonfull I have found this a valuable Med. in chronic cough. Dissolve the Gum Ammoniac in the mucilage & add the Latter Articles
Valerian Officinalis, Wild valerian, Radix Europe the root of this plant is the part used in Medicine consists of a number of slender fibres twisted and attach to one head of a light Brown colour having strong unpleasant smell

and a Warm Bitter taste If an Indigenous plant of Europe Several kinds of valerian grows in this country but are entirely different from that we get from Europe Like all other roots it yields its virtues to Alcohol Dr. Cullen found it useful in Epilepsy Hysteria and other spasmodic affections is a stimulant it excites the pulse & sometimes acts as an emetic In Chorea Vitti it has been used with success In hemerania Dr Stevian used it with success. In Richters work we find it was used In Gutta Serena nothing can be more ineffectual than when this is caused by a paralytic affection of the optic nerve when it is the consequence of organic derangement as of the Stomach it may be usefull In Fevers In low kinds of Fevers it is used in combination with Tonics and has done good in this way It must be evident to every one of you that it is inadmissible in high action as it is a stimulant as an Anthelmintic. Have no experience It is use in substance In infusion Tincture In substance Dose ℈j to ʒj 3 or 4 times in Day gradually increased

Crocus Sativus Saffron this is an article which ought to be banished from the Materia Medica

I might mention the different essential oils they act as stimulants and carmiatives we give them to render other mes. agreeable
Tar Tar Water and Tar Pills are used but I think the Tar Water is overrated when it is used it is made in the following manner Take 1 pint of Tar and 2 gallons of water to be stirred for several days The Pills are made with Tar & flour. Tar Water is useful in Chronic affections of the Chest as a Tonic I have given it with good success in scrophulous complaints
Warm Bath I might mention good effects of the warm Bath results from its use in several diseases but the time is so short that I cannot speak of it
Garlic, Allium Sativum This as you all know has a strong odour like onions Medicinal qualities of Garlic when applied to the skin in a bruised state will act as a Rubefacient we often use it as a stimulant Poultice It has been used in form of friction the expressed juice It has no more efficacy in form of friction than to rub the skin with a piece of wood

In deafness it is applied to the Meatus Auditorious externus I prefer the Tinct. of cantharides When used Internally it is stimulant it increase the pulse The doses of Garlic are given in Molasses The disease in which it is given it passes off always by the kidneys and I am of Opinion that it is taken into the Circulation at least its odour It has been used in Intermittent Fever as an Expectorant it is used. In acute croup Ether is used it is used with advantage but we collect gentlemen it ought not be given in high excitement. I might mention many others but time will not permit I shall now commence with the Tonics

Tonics

It is supposed that the difference between stimulants and Tonics is that the latter are more permanent in their action but this I altogether cannot believe It is a difficult thing to explain the action of Tonics The term signifies Medicines which strengthen braces and gives tone to the muscular fibre I find it difficult nor will I attempt to explain the operation of Tonics They increase the tone of the muscular fibre Tonics are those Meds which strengthen the system when debilitated Dr. Gregory says Tonics

operate by restoring due tension this is sceptical
I will retain the term tonics Bitterness is a
concomitant of Tonic most of the astringents are
Tonics Tonics act primarily on the stomach
the action they excite in that organ is conveyed
to different parts of the system by sympathy
1st To the Muscular

2d To the Nervous

3d

4

5 To the cellular texture

6th To the bloodvessels in all febrile affections
we know them to be propagated to the vascular
system. In Intermittent Fever tonics are prop
agated to the vascular system

7th To the skin

I might extend this further but I think I have gone far enough. Are Tonics absorbed? I answer no. They act primarily on the stomach and the action excited there is communicated to different parts of the Body by sympathy. The State of the system has great effects on the Administration of Tonics. Sometimes Tonics diminish the power of the system. I shall divide Tonics into vegetable and Minerals. I shall commence with the vegetable Tonics. First Peruvian Bark. This is called by Botanists Cinchona officinalis. Peruvian Bark has been but a few centuries ago. There are three kinds of Peruvian bark at present met with in our shops. The Pale red and the yellow leaving undetermin their Natural distinctions. The species of this genus it now appears are numerous and many of them Natives of Peru and it is not improbable that all or the greater number of these constitute to furnish the peruvian bark of commerce according to Dr. Powel the first is called Cordifolia lancifolia (the pale bark) Cinchonia cordifolia (yellow) Cinchona oblongefolia (red)

The first Cinchona Lancifolia the tree which
affords the bark is of considerable height The
2d Cinchona cordifolia the bark is taken
from the branches and trunk of the tree
and dried 3d Cinchona Oblongifolia the leaves
are longer than those of the two former and
of an Oblong shape The tree which affords the
Bark is said to be 100 feet high Much has
been on the composition of the bark and the
superiority of some of them which is unnec-
essary to mention as time will not permit If
you can by the red in pieces you may use
it but in powder it is inferior to the pale as it is
so adulterated by the druggists That the yellow
bark is prepared in this city Dr. of origin
made experiments on the Peruvian bark &
found that it increased the pulse 15 beats in
30 minutes Its efficacy in diseases is a powerfull
Tonic Its tonic power is evident in Intermittent
fevers Dr. Cullen remarks it is proper the
use of the bark is even resorted too in its early
stage by some practitioners, it is obvious that
when Inflammatory symptoms come on de-
pletion must be used as bleeding purging
Blistering &c and this sometimes cure the

disease It is proper before the exhibition of the Bark to give an Emetic In this district of country it sometimes occurs with visceral obstructions in such cases it is proper to attend to the viscera Mercury in these cases must be resorted to If Mercury was given no viscera was affected it would be of no Utility The remedies for Inflamation of the Liver are the same as many other Inflamations The proper time for its Exhibition is before the paroxysm or during the latter stage of Intermission It is so both in Tertian & quartan Dose ℥j There are advocates as respects the use before the paroxysm and Intermission we administer the bark As a Tonic to prevent the fever ʒj to ʒij to be given every hour or two In the west Indies they have given it in the dose of ℥j this John Bell would call rash practice In Infusion ℥j pulvis to 1 pint of boiling water make it agreable with cinnamon give it every before the Paroxysm we often give the serpentaria in combination when there is an apoplectic state before the paroxysm Bark is made missible till ℥j & has been end

In Remittent Fever, It was given by some and is very usefull after the depleting plan and the Inflamatory symptoms out in In Yellow fever It was given by some when this fever rages in this City but always found it ineffectual and found to have aggrevated the disease In this Of coriously is proper

In Typhus Fever In low stages it is highly beneficial we resort (in this stage) to powerfull stimulants and Tonics (In Pestis or plague I never saw a case therfore cannot say any thing of its use In Phlegmasia the Lancet is calld for In Rheumatism In our country it is Inflamatory and the Bark cannot succeed the use of the Lancet In low Miasmatic countries Dr. Barton recommend it in this state of Rheumatism when it occurs in such places In Podagra It is generally in the first stage Inflamatory and requires depletion In Hemicrania. Peruvian Bark is recommended

In Dysentery it cannot be applicable in the first stage as it is Inflamatory but when in a convalescence stage it is usefull

It has been recommended in Pulmonary diseases In all cases which I have seen require the utmost use of the Lancet the state of the system pulse &c will be your guide in the use of the Bark In Pleurisy of the head and chest the use of the Lancet must not be spared In Typhus Pleurisy the use of powerfull Stimulants are highly beneficial In this case you must Stimulate The decoction and Tincture answers very well
In Consumption I have not confidence in the use of the Bark or any other remedy particularly in Tubercular consumption
In Erysipelas the use of Bark was much used in Europe but in this country bark is inadmissible depletion is required in this country In some cases of our Alms house present prostration of Strength in which the use of Tonics are proper In Eruptive diseases always keep the state of the system in View and you cannot fail
In Hemorhagies the use of Tonics are inadmissible In Epilepsy when a prostration of Strength present Tonics are beneficial.

In Chorea St Viti Dr. Hamilton's plan of purging is beneficial this is a very intelligible disease I have not seen many cases of chorea St Viti

In Tetanus Dr. Rush & Dr. Hosack of New york reccommends it highly stimulants are highly usefull in this disease but I prefer the use of powerfull stimulants to Peruvian Bark

In Asthma in the latter stage it very useful

In Scurvy in combination with serpentaria & Bark is highly useful

In Scrophulous Dr. Forbyse reccommends it in this disease and Opthalmia but I should use bloodletting general and local

In Rachitis It is much used, Bark, shower Bath, sea Bathing &c are usefull as general remedies In Europe where Rachitis is much more frequent than in this country the invigorating plan must be used Exercise sea Bath &c

Application to Gangrene from the Professor of Surgery you have already learned that gangrene is preceded by Inflamation and gangrene unattended with Inflamation We must be in one who prescribes bark when of the

first kind it would aggravate the inflammation Bark has no Antiphlogistic properties The cure is precisely the same as when gangrene results from interruption of the circulation. Bark cannot not any other Mode, usefull In gangrene of the feet and toes of old people Mr Pott says he has derived no advantage from he has tried it in every shape To what species is it particularly usefull I answer to few the use of Blister, I have already mention are usefull Also Vol Alkali. Opium &c To gangrene unattended with inflamation I want you to lessen the high opinion of P Bark In Poisonous Wounds Abbe Fontanna recommends it I have no experience in the use of Bark in Poisonous wounds You will recollect that its employment in inflamation is injudicious and hurtfull Mode of giving it 1 ℥ of Powder in wine Milk, porter small doses are preferable to large as they will set better on the stomach but it sometimes happen that the stomach will eject it in substance therefore I shall mention some pharmaceutic treatment. Warm water diluted ~~drink of the~~

more of it than cold water. We prefer the aqueous preparations of Bark to alcoholic preparation ℥j of P Bark to 1 pint of boiling water and a little cinnamon give 1/8 part of this increase as circumstances indicate The Decoction is preferable to the Infusion The Tincture is not much used and is made as follows Call Tinc cinchona composita Vulgo Huxhams Tinc of Bark

℞ Pulved Bark ℥j
Seville orange peel ℥ss
Viag. Snake root bruised ℥ iij
Saffron — ℥ ß
Alcohol — ℔ ij

Digest for 14 days and strain
I have been in the habit of adding ½ to my decoction this makes it very grateful The Tinc of Huxham is such in Dyspeptic patients but this is not so usefull as in aqueous solution as in all chronic complaints it will by its long continuance debilitate the primæ viæ and will give a relish for ardent spirits External Applications the Bark Jacket is sometimes used In Intermittent fevers also in form of bath plasters & bath

but this is only auxiliary to its internal administration
If the Bark purges combine it with opium if it constipates
combine it with Magnesia and Rhubarb.

Gentian. Gentian Lutea Radix, Germany. Switzerland
This root is in long slender pieces soft and flexible
of a yellowish colour with a grayish epidermis it
has a very bitter taste without any peculiar flavour
this Bitterness is extracted both by water and Alcohol
Diluted Alcohol is its proper solvent. It has been
much used in Dyspepsia Hysteria and other nervous
complaints and is sometimes useful in scrophula
It is used in Intermittent fever Dose Bogr In
Infusion Decoction and Tincture you will see the
different preparations in Coxes Dispensatory
Colombo of the plant which furnishes this root
no botanical account has been obtained it has been
It has been said to be brought from Ceylon but
from later writers it appears to be the produce
of Southern Africa It is in round thin pieces
evidently formed by transverse sections of the
root the circumference of these is covered with
a Bark the woody parts of a light colour (yellow)
it has an Aromatic ~~smell the outermost bark~~
~~is worthless bodies~~ an Aromatic smell and
a Bitter taste It yields its bitterness to water

best proof spirit is its proper menstruum though the Tincture is not very strong This is a native plant growing in the western part of the U.S. is a very important bitter The taste is pungent and Bitter somewhat aromatic The root come to us in knotted pieces Internally of a light yellow colour the medicinal property is a strong bitter it excites the pulse the watery infusion is always preferred to alcoholic preparation. It is used in Dyspepsia In Dysentery it has lost its ~~prop-~~ ~~erties~~ reputation In Cholera Morbus In this disease in the West Indies is much used but a quite opposite treatment is pursued in this country not giving it till the convalescent stage It is conveniently given in Powder ℥ss which in urgent cases may be repeated every 3 or 4 hours In Infusion Decoction and Tincture it is given ——

Quassia, Quassia Excelsa Lignum West Indies the wood of the root of this tree is of a yellowish white colour it has a taste intensely bitter without any odour or aromatic flavour The bitterness is extracted equally by water and Alcohol The name was derived from a Negro Doctor of it is adapted to mild cases of Dyspepsia Hysteria and Poulage

The wood is given in dose of X or XI grains but better in cold Infusion. Form of Infusion

℞ Quassia ℥ss
Water quart j

The dose is not precise a wine glass full a dose

Angustura. Bark a Plant of the southern countries The bark comes to us in small pieces of a light yellow colour smell somewhat acid Aromatic It was by some practitioners placed equal to the Peruvian bark but this is not my opinion My own experience in it is limited you may give it in substance In Infusion, Tincture Dose of the Powder ℈j or ℈ij

Serpentaria. Virginiana Is a Perennial plant a native plant of America exclusively In addition to the Tonic It is a Diaphoretic In this country it is extensively used but we have to give it in increased action as it will excite the pulse it slightly stimulant Is frequently combined with Peruvian Bark in Intermittent Fevers In Typhus Fever It is also much used in combination with Bark I have used it freely myself but as a Tonic Vol Alkali is better than Serpentaria as a Stimulant. In Remittent Fever It is much

used and in combination with the Bark given in powder from ℈ss to ʒj given in Infusion By decoction its active properties are impaired Pinnus Virginiana This grows in lattitude 44° 29 min It is given in substance Infusion & Decoction the last is best Dr. Morris wrote an Essay on it vide those who have access to it would do well to peruse it It is given in Pul Monary consumption I have used it with great success and is highly usefull in Hectic Fever but it has been to much used in these complaints

Anthemis Nobilis Chamamelum Chamomile Flowers The bitterness with part of the colour is extracted by water and alcohol and if the Infusion has been made with warm water the flowers yield a small quantity of Essential oil Chamomile is a powerfull Bitter and as such is usefull in Dyspepsia forming a powerfull remedy which is in common use when employed for this purpose it ought to be under the form of cold infusion which is the most Gratefull The Infusion in Tepid water when strong acts as an Emetic and is often used to promote the action of the other Emetics In Substance it has been given as a remedy

a remedy in Intermittent Fevers in a dose of half a ℥ 3 or 4 times pr day Externally the Flowers steep in water are employed as a fomentation the extract which is intensely Bitter is convenient vehicle for forming Pills Especially when it coincides in virtue with the substance prescribed under this form It is frequently given as a Diaphoretic when given in warm water It is an Ancient remedy in Intermittent fevers ~~Cent~~ century. Myrrhis used as a Tonic but in my opinion is far Inferior to chamomile

Cornus Florida Tone of our own country production This is a very good Tonic grows in Latitude Dr. Walker wrote a valuable Thesis on Cornus Florida & Cornus Sericea the dose is the same as the Peruvian Bark and is said to be equal to it but use the Bark in preference to it Cornus sericea cannot be procured in such quantity as the other Therefore it is not much used

Cypripedium Pubescens This I have already told you that it has an Emetic effect & Diaphoretic & it is also a Tonic

I might mention many more but the course is so far advanced that time will not permit but I must refer you to Cullen and Murrays Materia Medica he mention many but thinks them far inferior to those allready mentioned I go on to speak of mineral Tonics Of Ferrum Iron Nearly like all other Metals in its Metallic State is inert but when it is finely powdered is usefull as a vermifuge it acts Mechanically Chemistry with its Industry has investigated its preparations Thus speak of Carbonate of Iron when the Metal is exposed to humid atmosphere When the Metal attracts the Oxygen of the air is oxidized and also combines with another part of the atmospheric air carbonic Acid which forms the salt There are two carbonates 1st, Carbonas Ferri precipitatus prepared by adding a solution of carbonate of soda to a solution of sulphate of Iron washing and drying the precipitation formed by the mutual decomposition But we shall consider the Carbonate of Iron or Rubigo Ferri which is superior average dose of

to 10 grains It may be given in large Doses but I prefer small doses its virtue is the same in small as in large doses Physicians are fond of Formulas It is therefore frequently combined with several Bitters & for the combination refer you to Cox's Dispensatory Use it in the following manner in combination with bitters viz

I have sometimes used Rhubarb, and ginger is a very usefull addition

Sulphate of Iron Sal Martis (copperas)
In large doses causes vomiting spasms &c
I have no hesitation to recommend it in combination with Rubigo Ferri Muriatic Acid added to Iron form Muriate of Iron This is employed under the form of Tinctura This is prepared by dissolving the solution with Alcohol Tinctura Ferri Muriatis is a very Active preparation sometimes to much so as to admit of its being used in an irritable state of the stomach It dose is 100 to 15 drops diluted with water

or taken in wine The Tonic quality of Iron has led to its use in Intermittent Fevers particularly in combination with Peruvian Bark but in high excitement It is prejudicial. In Chlorosis, Gleet &c also must be used in Marasmus of Children The Formulae which I have already mentioned is very good one in this disease (marasmus) Dose proportionate to age I have derived much benefit from this formulae after purging the child several times In cancer Iron has been given and recommended by Dr. Carmichael this is vague and produces no effect on cancer Dr. Barton supposed it to enter the blood but this Dr. Chapman opposes several graduates of this University also approbate it Dr. Dorsey rather inclines to its entering the circulation Aromatics retain it in the stomach As Orange Peel &c

Cupreum. Copper To its chemical preparation I refer you to the Professor of Chemistry when copper is taken into the stomach which it sometimes is by children and it causes disagreeable Symptoms commonly you will find it evacuates

in 48 hours but when Acidity exists in the stomach forms a Neutral salt as this sometimes causes bad Symptoms we should give no acid nor Acescent food By doing this I have very seldom seen any bad effects from it but they have occurred Symptoms nausea vomiting of Blood convulsions, syncope & death. I have seen a child which swallowed a piece of Iron And the Iron passed of in a short time I once saw the Anus lacerated by a piece of Bone accidentally swallowed which passed the Ano. A Ptyalism sometimes takes place when copper has been taken Dr. Barton relates such a case

The Ammoniuret of Copper (Ammoniuretum cupri) It is prepared by triturating sulphate of copper & carbonate of Ammonia together and is either a ternary compound of oxide & copper ammonia & sulphuric or a mixture of sulphate of ammonia & the compound of ammonia with oxide of copper It has been much used in Epilepsy cases in which it has been employed no relief was afforded I never used it myself freely & never seen it beneficial Dose ½ grain gradually increased given 2 or 3 times per day Doctor Mitchell gave ½ grains 3 times per day

Dr. Dicks recipe

Flowers of Zinc ℥j
Cupri Ammoniuretum ʒj
Winters Bark - - ℥ss
Syrup - - - ℥ss

Dose 1/30 of a grain of cupreum Ammoniuretum
In large doses it acts as an emetic therefore use it in small doses as a Tonic In chorea it is used I have used it in one case without any advantage
Sulphate of copper has been recommended in Intermittent Fever & Formulae in which it is given ℞ Sulph copper IV gr } Divide into
Capsicum ℈ ʒ } 8 pills 1 pill 3 pr day
I have used it in this formulae it produced nausea Dr. Monroe thought it usefull when it nauseates It is used in surgical cases Dr. Physic used it in this formulae In sore throat and I have used it myself and find many

Sulph of copper ʒj
Peruvian Bark ℥j } as a gargle
2 or 4 ℥ of water

A solution is used as Collyrium in opthalmia when collyriums are usefull or indicate
Tin has been used as a Tonic I have never seen it used as such I use it as an Anthelmintic as already observed

Argentum If considered a Perfect Metal the only prep
ation we have of it is Nitrate of silver Form of
making it

This is generally used as an Escharotic was once used
as a Tonic in Epilepsy and is again revived I have
used it in Epilepsy but without any benefit Dose 1/8 of gr
in form of a pill you make it into a solution and
mix it with crumbs of Bread and make a mass of
it and form it into pills half of your Pharmaceut
preparations make its dose 1/3 or 1/4 of a grain It has been
given in large doses Nitrate of silver as an escharotic
is much used it does not act entirely as an escharotic
but Also as a Tonic & Stimulant

Gold I have very little to say on this metal Dr
has called the attention of Physicians to one of its
preparations he says the muriate is the best prepa
ration of this Metal he extols it in Syphylis & I have
known it tried & completely fail in Syphylis, I would
rather see a Specific for a Cancer than for the
venereal As we have mercury for the latter disease
which by its proper use will cure Syphylis

Zincum Zinc In its metallic state has no effect
on the human body An oxide of it has been used
in Epilepsy & Sulph of Zinc & Flowers of Zinc

like Blue Vitriol it has an excess of Acid Dr. Barton has used it in Epilepsy In Pertussis it is much used. In Palpitation of the Heart when it arises from Dyspepsia is usefull it is given in Solution in the following Manner

White Vitriol when combined with Laudanum is much used as an Injection in Gonorrhoea viz

℞ White vitriol X or XII gr
in ½ Pint of water
Laudanum is sometimes added

When Irritation exists, Hernia Humoralis and Strictures are the consequences when too strong it is not to be used any other Injection untill Inflamatory action is subdued this is applicable to all Injection

Acetate Zinc this is formed by adding to a solution of silp of Zinc to a solution of acetate of Lead a precipitate forms which is an Acetate of Zinc a decomposition takes place the Acetic Acid unites to the Zinc and the sulphuric Acid of the Zinc to the Lead My formulae as an injection for the Gonorrhoea is as follows

Acetate of Lead ℥ gr
Sulph of Zinc VIII gr
Aqua ——— VIII ℥

this is to be used after the Inflammatory action is over
Bismuth is an Oxide much used of this Metal
in Dyspepsia Dr. found it highly useful
in Dyspepsia In this Country it is not much
used I have used it in one case with tolerable
advantage 5 or 6 grains 2 or 3 times pr. Day in syrup
Arsenic This is another semi metal oxygen converts
it into an Acid when heat. a garlic or onion is very
perceptible and this is important in Medical Jurispru
dence is soluble in water & changes vegetable blues
It is easily converted into Arsenious Acid by adding a
portion of Oxygen to it but shall retain the term
of White oxide of Arsenic It is obtained from dif
ferent metallic ores as cobalt & Nickel Taste
is acrid & sparingly soluble in water In small
doses of few grains I have seen it kill and upon
Dissection the cardiac portion of the stomach
inflamed Dissections of others have found it
Inflamed Dr. Physick has found the stomach
gangrenous Symptoms Nausea burning sen
sation impeded respiration convulsions & death
a violent vomiting to prevent its bad effects Oils
may be used and Emetics as Tartar Emetic Sulph
of Zinc In France Sulphuret of Antimony is
used as an antidote but this is too feeble

even externally applied Ulcers has caused such Symptoms when Nausea &c occurs you must not submitt from its external Application. Preparations of Arsenic are several I shall only mention a few Dose of Arsenious Acid 1/16 of a grain Fowlers solution is made in the following Manner ~~10 or 15 drops~~

10 or 15 drops 3 or 4 times in Day for an adult gradually increased for a Child 3 yrs old 3 Drops for 4 yrs 4 gtts 5 yrs 5 gutt &c Dawins preparation has no preference to Fowlers solution and the latter is more used This Mde is latterly much used In Intermittent Feivers Thew used it freely where Peruvian Bark has failed There are many cases in which one is preferable Dr Barton remarks that the Arsenic is inadmissible in Typhoid cases of Intermittents It may be advantageously employd in remittents of Children They will take Fowlers solution when the Bark cannot be retained when the pulse is active & Irregular I found the Arsenic usefull

It does not stimulate & does not cause head ache. It puts a period to the existence of an Intermittent fever in a short time. Peruvian Bark cannot be given in the hot stage but powder solution can I have no doubt when given in large doses it may do harm in the hot stage Dropsical swelling will result from its long use but this is rare It is a Tonic & there is no proof that it has no Tonic power. It is a Tonic there can be no doubt a great many prejudices exist against its use and it is therefore necessary to conceal the name of it in our administration and I am sorry that it has extended to Physicians. In Periodical Headache it is useful as well as a Bitter Tonic In Rheumatism Dr. Barton has long been in the habit of using and recommends it highly In Hemorhage it has been used but I think it not adapted to it in this Disease In Chorea St Viti & Asthma it is used but I think without advantage In Scrophula It is used (already) as you have been told by Dr Physick In Eruption resembling the Venereal Eruption it thought serviceable

In Cancer — It is used both externally & internally it is an ingredient of several Nostrums for this Terrible complaint but I think it not possessed of so great encomiums bestowed on it in this disease I advise you to read Sir Everard Holmes work on Cancer before you use it in Cancer In Cancer of the Uterus I have used it in Vain I might mention Many more cases in which it has been used but our time will not permit me to say any more on the Subject

I shall next proceed to speak of Sulphuric Acid This is a valuable Tonic Mild in its Action may be taken in water (which is the proper vehicle) about 20 or 30 drops to 1 pint of water Elixir of Vitriol is made by

This is generally preferred to the acid it is more agreeable If you use the Sulphuric acid if it is very strong 2 or 3 drops will be sufficient for 1 pint of water This Acid is used in many cases of Debility It is said to restrain Diaphoresis In Epilepsy it is used but in this disease is an useless Med An Ointment in the following manner (for a

Nitric Acid. If used in form of Mucilage & nitric Acid ℥ss

Solution of Gum Arabic ℥ VI always make it secundum artem i.e. pour nitric acid on the Mucilage and not on the gum Arabic - If used in Jaundice, Hepatitis in the West Indies It is used as a Tonic in some of Venereal It was used highly extolled in Syphylis Dr. Smith a graduate of this University of Charlestown S Carolina made it the subject of his Inaugural dissertation who made a number of experiments, vide his Thesis he places it on the same footing as mercury in Syphylis but this is certainly erroneous It is now found to be inefficacious in Syphylis in which disease it has been so highly recommended.

Muriatic Acid has properties analogous to Nitric Acid used in the same diseases as Jaundice &c in which the latter is used We pass on to speak of Astringents In the language of Cullen astringents are those Medicines

Dr Cullen exemplifies the action of astringents to the tannin of leather it may however be evident that the Analogy between living and dead is different Astringents do not chemically act on living matter. By making an impression on the stomach we check hemorhagy of different parts of the system we have abundant proofs that they have an effect of putting a stop to hemorhagy in distinct parts as the Uterus Nose lungs & Intestines &c Lack Saturni has this power in a short time they cannot be absorb for such a small quantity as Acetate of Lead taken into the stomach circulation could not have this effect in so short a period as is evident to all Medical men Astringents are Stimulents & Tonics they are use in Intermittent fevers some writers have denied the existence they say astringents are Tonics if those gentlemen will give proof that Tonics will suppress hemorhagy then let us place them under the class Tonics

But this is not the case Tonics instead of suppressing hemorhagy will increase the discharge of blood by increasing the Vascular System Tannin principle the test of this principle is gelatine forms leather this principle is often united to Bitterness In the logwood the astringent principle is united to the saccharine I shall next speak of the Individual astringents they are bitter I shall follow the course of my predecessor in commencing to speak of the Individual Articles

Extract of Catechu this is obtained from plant a species of Mimosa

The extract is obtained By Boiling and evaporating It is a gum resin leaves an astringent taste in the Mouth it strikes a Black colour with salts of Iron contains an Earthy substance I am in the habit of using it in ulcers (of ulcers from Bleeding) Of its internal administration I have not much experience Dr. Barton used it in Intermittents fever in combination with columbo Dose 15 or 20 gr with Wormwood Syrup

In England it is much used in spongy gums Analagous to its properties we have Kino Dr. Stottergill speaks of it as a new gum it is said to come from a tree

The term Kino is generally attributed Dr. Murray of Edinburgh whose work is probably in the hands of you all who speaks of it widely Kino of New Holland is similar to that from Africa The Analysis from Kino is not different from Catechu Dose 10 or 20 Drachms in the course of the day suspended in Mucilaginous mixtures It is also given in Tincture In Intermittent Fevers Dr. Barton used it with success where Peruvian Bark & Cinchona failed It is given in uterine hemorhagy In Gonorhoea it is given as an injection but it is generally in large doses. In Diarrhoea I generally use it in this City & I use it in the following prescription

℞ Creta Preparata ℥ ss
Kino ℥ ss
Mucilag mimosa nilotica ℥ VI
Laudanum — gtt LX
Cinnamon small quantity Pulv gall ℥ j
Brandy lb ss

A Table spoonfull every 2 hours

In Pyrosis Dr. Ure used it and speaks highly of it. In Diabetis he also gave it in combination with opium. ℞ Gum gr V
Opium gr ss

Dr Ure says This species of Oak is different numerous the bark of all of them is astringent the black oak is said to have less astringent power Dose ℥ss to ℥j The oak Bark is used in Cynanche as a gargle In Tetter a strong Decoction is very beneficial Galls are excrescence of oak and is said to be caused by a Deposition of an Insect Eggs of the synops kind The heavier they are the better Aleppo kind are the best In Infusions changes vegetable Blues to a red owing to the Gallic Acid It is used in all cases in which the Peruvian bark is used. In Intermittent fever I never used it always used other remedies In Dysentery is used I give it in the following manner that is when Astringents are indicated ℞ Pulv Galla ℥j
a little cinnamon
Boil in Pt ℥j of Brandy
When Diarrhoea assumes a chronic form this is a valuable remedy. In hemorhoidal affections it is generally made into an ointment

which is a popular remedy It is also used in prolapsus Ani In Cholera it is also used Lignum Campechianse Logwood this is much used in Dysentery especially in Children Geranium Maculatum grows throughout the United States used in Bowel complaints Cholera Morbus & Dysentery It is generally given in Decoction with Milk
Black Alder The Bark is said by Dr Moise to be good in Gangrene May be tried in Intermittent fevers In Herpetic Eruptions

Dewberry root an article much used by Dr Chapman every part of the plant is active It is given in the following manner In Cholera Infantum

℞ of the bruised root ½ ℔ of water Dose a Table spoonfull In Dysentery In Dysentery & Diarrhoea it is also used It is an astringent but I think it not so powerfull an astringe Uva Ursi

We goon to speak of the Mineral Astringents

Iron In a Metallic state as Dr. Cullen remarks is void of Astringent powers. is evident in its restraining several evacuations but this might be owing to its Tonic power I find it Difficult to say how it operates, probably meets with some kind in the Alimentary canal when it checks Semiflux it may be considered as an Astringent

Copper Several of its preparations is used as a Collyrium as Blue vitriol This latter Preparation is much used as a Collyrium in Opthalmia

Silver I do not know that any of its preparations have any astringent powers

Zincum Zinc Much used as an astringent (its preparations) as a Collyrium

Plumbum Lead In its metallic state is not used as a Medicine Its preparations are extensively employed Acetate of Lead This is frequently employed as an astringent in Many cases External applications It is often used as a Lead water poultice as a Collyrium Internally it is much used

Persons employed in Manufactories of this Metal are sallow and are subject to a disease called Colica pictonum In Lead Mines poultry are affected in the same manner Painter Glazier printers Stone cutters Apothecaries &c who are frequent affected with this disease this owing to their working with it It is not however Gentlemen to be considered that Colica pictonum cannot be caused without Lead being its remote cause Copper Antimony &c are sometimes the remote cause When taken in large quantities into the Stomach produces serious consequences Happily that Nausea vomiting &c comes & the Stomach ejects it Probably the best Method of Preventing or lessening the effects is to give an Emetic & evacuate the bowels with a Cathartic the Olicini will answer very well The primary effects of lead on the system is said to be stimulant Dr of Maryland who made experiments on the pulse consequently is a stimulant Dose from 5 to 2gr but it has been increased to 3j without Inconvenience Dr Barton gave the Mde In Obstinate Intermittent he gave it

it in cases where Peruvian Bark & Capsicum
with success The cases in which I find it it had
no effect I do not think much of it in Intermittents
In Epilepsy It has long been used It is said to
to be beneficial specially in young people
it must be continued long whether it is use
full I cannot say I never used it
In Pertussis It has been used in Europe but
it does no good It has been recommended in
Tetanus it must act by inducing a new
disease Opium & the diffusible Stimulants
are the best remedies in this case
In Mania It has again & again been used
I have never seen it used In Melancholia
the same remark is applicable to Melan
cholia as mania
In Bowel complaints It is used as an astring
ent & Sedative In inflamed parts externally
it is found of great service but it is not known
whether it will act in this way on the in
flamed part of the stomach & bowels. From
the cases which I have seen it is used with
this Intention no good result as it will cause
a disease call Colic pictonum
I think it Injurious

Sugar of Lead is indirectly a sedative Dr Barton tried it in Cholera Morbus but never continued the practice In Leucorrhoea & Gonorrhoea in the form of an Injection In Hemorhagies It has been said by Dr Hebenden to be a specific But this is not the fact Applied directly to the open mouth of the vessels and internally in those hemorhages where the pulse continues active not withstanding V.S. It has been given (and is yet) in Epistaxis Hemoptysis & Hematemesis & hemorhages of other parts as uterine hemorhage with good effect the dose is about 3 gr at short Intervals the dose has been increased to 8 or 10 gr Dr. Barton recommended 1 gr of opium to be combined he also combined Ipecacuanha with it Dr Ungentum is made of Acetate of lead which is much used

White Lead being a acetate - Sub acetate of lead is made into an ointment which relieves pain & Inflamation I have seen it used in Burns where Dr. Hentish application was inefficient with benefit It is made as follows ℞ White Lead / Lig Sand / Log Sand / Bee wax

In hemorhoids this ointment is much used & I have used it with great success

Sulphas Aluminis The astringency is manifestly test Dr. Cullen used it in intermittent fever but remarks that it was to irritating and wisely laid it aside Dr. Darwin thought it well adapted to bowel complaints. In Cholera Morbus combined with Laudanum In Hemorhages it is much used Dr. Thompson gave it in large doses In Leucorhoea it is used In Gonorhoea it forms a very good Astringent lotion a Collyrium it is often used you will find a prescription in the Elements of Surgery

Burnt Alum I have already mentioned when speaking on escharotics

Creta Preparata carbonate of lime pure lime is used as an astringent the cret occurs This tune is much used in Bowel complaints and is usefull in Diarhoea it retains it In Dysentery we use the Medicine but not before the bile is evacuated then it is beneficial

a Formula ℞ prep chalk ℥ss
Opium gr 18
Spice — gr 18
into 8 powders 1 to be given every 3 hours or 4 — to a child 5-6 years 1/2 the quantity

Chalk Julep
I made as follows

Muriate of lime & Barytes in scrophula
and many other diseases is much used and
as much experience as I have had I am
sorry to say that we have no med. for those
diseases which invades our unhappy citizens
happy would it be for the Medical art to
have a specific for this dreadful disease
(scrophula)

Valedictory address
FINIS
Friday. February 28th. 1817
Manuscript Notes taken by J. Y. Clark
Including 62 Lectures Delivered by
John Syng Dorsey M.D.

Epispastics.

Epispastics, I shall make this term include three ~~parts~~ different degrees of Epispastics. 1st Rubefacients, 2d Vesicatories and 3 Caustics as they only excoriate locally I do not hesitate in placing them at the bottom of our lists as they possess a stimulating property they form a kind of connecting link between the Evacuantia & Stimulantia 1st Of Rubefacients, there are many and modes of exciting a Rubefacient effect friction & in cases of drowned persons palsy & pneumonia Typhoidea friction have been found very beneficial among the chemical remedies heat may be used and is generally attended with good effects, Bricks, hot Corn &c these Articles have been recommended when speaking Diaphoretics but it is on acco of their local stimulant effects I notice them here the practice of Burning with moxa is still practicable on the continent of Europe however it is only practised in extreme cases Dr. Physick employd it in a case of Asphyxia with good effect the use of warm water has been tied in many cases as paronychia &c but I am inclind to think that a Blister would answer

better in low cases of Fever it has been used
I prefer for this purpose heated oats as they retain
the heat better, the water cools to soon and really
leaves the body in a colder state than it was
before the application of the Cloths particularly if
they have remained on a short time. In hysteric
cold feet is attendant and is relieved by warm
Water, bricks &c In Gout of the stomach heat ap
plied to the stomach is an excellent application
In Hemicrania I have by the application of heat
relieved the pain, several chemical preparations
have been used as Vol Alkali & Olive oil in equal
proportions, you make an irritating liniment
it is found good in Inflamatory affections of the
throat it is a very popular remedy in this country
in some cases of Rheumatism it has been found
beneficial. One of the most beneficial Rubefacients
we have is Oleum Terebinthaenum in inflamatory
affections of the throat nothing is more beneficial,
you know by exciting inflamation externally
you relieve inflamation internally by mixing
Ol Terebinthae ℥IV & Camphor ℥j you have
what is call white heads ointment of Mustard
& with some simple addictions you have what
is call Tispots Drops, Turpentine has been
used in Burns &c we are indebted to Dr. Hunter

for this practice it ought to be carefully applied on the diseased part and not let any of the ointment get on the sound part. It has got in some measure into discredit with some practitioners in consequence of their slovenly way of applying it. The odour of the Medicine is best disguised by the oil of Sassafras. I have it save the life of a child by immersing it in a bath of Turpentine. I might here mention all the essential oils also as Rubefacients, but I do not wish to add to the list. I here ought to notice camphor, but as I spoke of combing it with Turpentine I shall pass it by. I do not intend to forget the Tart Emetic as I observed once before it was a Rubefacient and a very powerfull one by sprinkling a little Tart Emetic on a Plaister of Burgundy Pitch and applying it on the part it will in the course of a short time produce a great irritation. when it has continued long enough take off the plaister and I shall notice some of the Cataplasm of these I might enumerate many but will only notice a few the most simple of these is the Farrinaceous articles mixed with vinegar & salt this composition is offensive in cases of children when we want to add to the irritating properties of the plaister you may use Garlic Horseradish &c. The garlic is preferable to the latter but mustard is better

is better than either in cases of extreme debility and in cases of fever where the system is in a low state Mustard 1 part Vinegar & Rye flour three parts mix Cataplasm and applied are found useful this is my common application in those cases in the most extreme ~~cases~~ cases of Gout apoplexy coma &c we use Mustard & Rye Flour in equal parts as Mustard & vinegar alone. I have more than once seen Gangrene result from the application of the latter so I would advise you to be cautious in its application you ought to examine frequently and when redness appears take it off. I have used the Cayenne Pepper with great advantage We are next to speak of Vesicatoria they are those Medicines which when applied externally produce a discharge from the skin there are many articles which produce this all those which I have noticed as Rubefacients increased to a certain degree produce a discharge from the skin but we will notice them which are more properly called vesicatories.

Cantharides For the natural History of these insects I refer you to the different Writers on the subject In France Spain & Italy they are very plenty it appears they were known to Hippocrates. The Arabians took more pains to discover their properties than their predecessors.

they found them usefull in apoplexia & lethargic cases no particular directions is necessary to make the Plaister only be carefull to press the flies well into the Ungentum which being previously spread on Leather &c by not paying attention to this particular not a sufficient quantity of flies will adhere to produce the desired effect in many cases the ungentum cantharides may be applicable. This is to be made by finely powdered flies to Ungentum Basilicon untill the ointment can take up no more this form may be particularly applicable in affections of the Eyes &c for the purpose of especeting the Blistering process the Spt of Turpentine has been used by Dr. Hartshorn of this City I have used it and found it to effect the Blister very much the part is to be wet with the Spt of Turpentine & the Blister sprinkled &c Sometime Gauze has been used in order to prevent stinging from an idea that the flies were absorbed, when using of cantharides this wholly unnecessary as respects the dry plaister. I cannot say that Gauze is really necessary it is usual to sprinkle vinegar on which is proper the average time for a Blister to remain on is about 6 or 8 hours you will recollect however that on the Head it must remain on 24 hours. The Water discharge is not effect from that of the serum of the blood

Blisters like Bleeding & purging are applicable to certain stages of every disease Dr. Percival resumes their application under 3 Different Heads
1st When the action of the muscular fibre is too weak
2d When the action is irregular
3d When the action is to strong
This includes every state of the system
In Fevers, Blisters have for many years have been considered as the first remedies they are used in every stage of fever but it has been found that they do little or no good in the first stage of fevers Dr. Rush says When the system is prepared they act like a conductor to carry off all Morbid matter & if applied too early or too late they are not found to answer good effects. I believe that much harm has resulted from applying them too late the Blistering point Gentlemen Wish not to consider as mathematical but after the proper remedies as B.S. & purging has been used then comes the use of Blisters it is all one what point the system is at the application to be carried to the extent of the violence of the disease as Yellow Fever require more Bleeding than any other disease why not more blistering. Hence in the Yellow Fever frequently applied as high as Six Blisters. In cases of Phlegmasia with the

general inflamation or Phlegmasia with local Inflamation blisters act the same when local or general they first yield as readily for vomiting &c you generally apply a Blister on the stomach where as to apply a Blister on each Wrist will produce the same effects Dr. Cullen says too much has been ascribed to the discharge produced by the Blister he says they act by their Contispormodic power - I do not deny. I do ~~not deny~~ that fevers is produced by sperm. The phrase that they act by equalizing excitement I do reject, but will say that they act by exciting inflamation externally you relieve it internally yet ~~in~~ the same degree of Inflamation is the same how it is I cannot say but so it is the effect result in order to prevent strangury as it sometimes it does occur and where Barley water Gum Arabic Tea is allowable you must use them but in most cases they are not allowable. The best remedy I know and to be prefered to the Barley Water, Gum Arabic Tea is an Emolyent ~~Clysterum~~ and it generally relieves strangury occurs very irregular In Typhoid cases I Remark the utility of Venesection and in some of those low cases Blisters will not rise & under those circumstances they generally terminate in Gangrene. When there is any doubt ~~existing~~ as respects the blister not rising in consequence of the state of the system

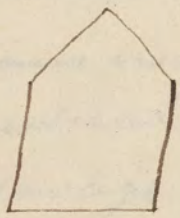
being very low under those circumstances you must apply them on the upper extremities in preference to the lower, as it is found that its upper extremity retains the power of life much longer than the lower. In the Phlegmasia they are found highly beneficial in those cases these two actions seem to do good by stimulating the vessels of the skin externally &c
In Mania you shave the head and apply a blister externally which when Inflamation is produced the disease is relieved internally
In Pleurisy you apply a Blister on the Thorax
In Ophalmia you produce an Inflamation externally in those diseases which Dr. Rush calls intestinal state of Fever they are very usefull as in obstinate cases of Diarhoea they may be applied on the abdomen sometimes in this disease. Medicines are found to have no effect until Blisters are used. In Spasmodic they are usefull as in convulsions, Asthma Epilepsy &c they have been recommended by Hoffman & many others of the older writers in those diseases.
In Pulmonary Consumption they are good and in some instances have been attended with the most happy effects by applying them on the Thorax In Cynanche Tracheales after bleeding emetics & purges Blisters is of great advantage in all other anginose affections.

In Cynanche Parotidea ( ) when the testicles inflame the application of a Blister is recommended In Scarlatina Dr. Barton recommends a Blister behind the ear and in all diseases in certain states. They act by evacuating & by a specific impression. Blisters Put an immediate Stop to gangrene Dr. Physick always resorts to blisters. If Pies universally succeed a strip is plaid over the living and gangrenous parts this will put a stop to gangrene except in the gangrene of the Toes of Old People Dr Dorsey says he has put a stop to Mortification by a Blister even in a case of this kind. I shall now commence to speak of Lytta Vetatta or Potatoe Fly/ vide Dr. Coxe's Dispensatory first introduced into practice by Dr. Chapman of Chester County Penn.a proved from the Potatoe vines Dr. Gowen of Massachusetts

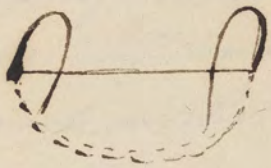
Dr. Schott made them the subject of his Inaugural Thesis made experiments and found that they produced Blisters in much shorter time than the Spanish Fly of the powder he made a plaster that produced a Blister in 5 1/2 hours & some in 3 hours and that they are superior to the Melloe vesicatoria

The Natural Tincture produces vesication.
The Tinc & powder both produce strangury
From my experience I find the difference
between the Potato & Spanish Fly to be
very small I think one is as active as the other
Mode of Application of Blister to the Head
The Head should be shaved previous to their
application. The Plaister should be a large one
to embrace nearly the whole cranium of an
oval form with hole cut in the edge to allow it to
lay close. A Handkerchief bound round the head
to keep the plaister in contact with every the part
In shaving the head wherever you can (particularly
in Ladies) leave the front part of the head with
hair on as it will prevent them from wearing
a wig. Sometimes to the back of the neck will
answer the purpose and saves the patient
hair. cut in the shape of a half moon, holes
in the corner for strings. For the Ear it is cut
in the same shape For the Forehead the same
For the Eye lids on the shape
about the size of Dollar formerly applied
adhesive plaister over the eyelids to prevent any
of the flies from getting in the Eye but this
precaution is unnecessary as the tears will
wash out any particle of the fly which
has got into the eye

For the Epigastrium in the Following Shape



For in the Throat a small oblong plaister is to be used when we only wish to Blister the Tonsils the Following



The Middle not to be spread with the flies.

All other parts of the Body are to be blistered with oval or square Blisters

Cauterium Actuale

Actual Cautery, It is but little employd at this time They are occasionally used in the French Hospitals Doctor Valentine mention that Mania & Epilepsy are relieved by it scind by it, he entols cautery highly applies them to the occiput. I shall only remark

* Insertion of deltoid muscle — Sinner harm sting

that Issues & Setons answer the same purpose — Moxa — Burning moss on the Body. The Indians use them and I hope that our modern medical Brethren will not resort to their savage Practice

Setons & Caustics

The seton is generally applied to the back of the neck & the diseases are chronic on which blisters are usefull. In head ache of the perpetual kind, chronic inflamation of the eyes, ears, scrophulous Joints in the healing up of old ulcers or chronic affections of the lungs, always near the affected part, In chronic cases to the left arm in the deltoid muscle Vide Vol 2d Elements of Surgery

Caustics, These destroy the Texture of the part, they excite an action which the vital powers cannot overcome by adding quick lime, their action is chemical, van Helmot was the first who asserted that they have no effect on the dead Body

Caustic Potash. Prepared by adding Quick lime to the Carbonate of Potash this is the most powerfull of all caustics made into Moulds.

It is very deliquescent it is to be secluded from the air, kept in Bottles well stopped it is to be applied cautiously not too deep as it might if near an Artery produce a sloughing of the Artery which would be a serious consequence. If left too long is apt to produce a large ulcer by spreading. Its deliquesence renders it extremely proper in ulcers with callous edges. In opening an Abscess it is better adapted than any escharotic as it will soak and spread as before mentioned into the Abscess. In making Issues it is immediately neutralized by Vinegar on that occasion it is usefull in burning fungous tumours of the mouth. The mineral acids act rapidly as escharotics especially the Sulphuric and Nitric acids but from their fluidity they can seldom be conveniently employed

Nitrate of Silver

This is adapted to all cases ~~where the ulcers~~ where escharotics are to be used. It changes the condition of parts and renders them ready to heal producing healthy granulation. This is to be used in Chancres. This preparation is obtained by Dissolving silver in Nitric acid

and evaporating the solution to dryness, melting the mass by a gentle heat and while liquid running it into cylyndrical moulds in which as it cools it becomes concrete

Sulphas Cupri. Red Precipitate, Burnt Allum corrosive Sublimate and Arsenic are all used

Juniperus Sabinus, Savine. The leaves as I have before mentioned possesses an acrid power whence they are employed. The Powder sprinkled on warts and other excresences removes them it is used as an application to old ulcers, keeps up a discharge from an Issue, It will not excite a strangury as cantharides does It is made into an Ointment as follows

℞ Pulv: Savine leaves lbs
Melted Lard — lb j
Beeswax — lb ss

I have now finished with Epispastics

Dr. Doseys, Classification

First, Evacuantia	Second Stimulantia
Bloodletting	Tonics
Emetics	Astringent
Cathartics	Narcotics
Sialagogues	Antispasmodics
Diuretics	
Diaphoretics	
Anthelmintics	
Epispastics	
Emenagogues	

First Bloodletting is that operation by means of which we abstract Blood from the system either by the lancet, cupping or leeching

Emetics are those med. which excite vomiting and throwing up the contents of the stomach for the time present in it they are divided into the vegetable & mineral Emetics

First the vegetable —

1 Ipecachuhanna (Calicoca Ipecac) from Peru Root Dose gr 15-20
2 Indian Physick (Spirea Trifoliata) N America Cortex — Do gr 30-40
3 Nicotiana Tobacum (Tobacco) — Do — — Do small
4 Scilla Maritima (sea onion) squill) Spain — Do 4, 8 gr

Mineral Emetics

1 Antimony found in Germany, Hungary & France
Tartrite of Antimony made by taking
Grams of Antimony — 3 pts
Tartrite of Potash — 4 pts
Water — 32 pt
and Boil untill it forms a Triple Salt — Dose — 5-10 gr
2 Sulphas Zinci (White vitriol) — — Dose — 10-15 gr
3 Sulphas Cupri (Blue vitriol) — — Dose — 2-5 gr
4 Sub Sulphas of Mercury (Turpith Mineral) Do — 3-5 gr

Cathartics

Cathartics are those Medicines which promote the Discharges of the Alvine faeces —
Of the Vegetable Cathartics
1 Sinapis Alba and Nigrum (Mustard White & Black — Dose Table spoon j
2 Juglans Cinerea (White Walnut) — Lax & Cath. Do. 6, 10 ℥ 14-30 gr
3 Podophyllum Peltatum (May apple) Root — Do. — j ʒ
4 Manna (Fraxinus ornus) Mediterranean — — Do j ij ℥
5 Oleum Ricini (Castor oil) W Indies — — Do. j ℥
6 Senna Cassia (senna) Africa & Egypt (give with manna ℥ss) ℥℥
made into Tea ℥ss to ℔ of water & sweetened Dose Wineglassfull — 2 hours
7 Rheum Palmatum (Rhubarb) China — Dose 20, 30 gr
8 Convolvulus Jalapi (Jalap) South America (root Do. ℥℥
9 Aloe Perfoliata (Aloes) Gum Resin Do. j ʒ
10 Gamboge (E Indies) with 10 gr of Ca. Do. ij-5 gr

11 Convolvulus Scammonia (Mediterranean scammony) Gum Resin — Dose 2, 10 gr
12 Cucumis Colocynthis ( ) Turkey — Do 2, 6 gr
13 Hellebous Niger (Melampodium) Black Hellebore — Do
14 Cucumis Agreste (Momordica Elaterium) — Do ß gr

Mineral Cathartics

1 Calomel — Dose — 10 gr
2 Sulphur — Do 1, 2 ʒ
3 Magnesia — Do
4 Sulphate of soda (Sals Glauberius) — Do — 1 ʒ
5 Sulphate of magnesia (Epsom Salt) — Do 1 ʒ
6 Tartrite of Potasse et Sodae (Rochelle salt — Do — 1 ʒ
7 Super Tartrite of Potasse (Cremor Tartar — Do 2 ʒ 2 hours
8 Tartrate of Potasse (Soluble Tartar) — Do 6 ʒ 1 ½ ʒ
9 Phosphate of Soda — Do 1 ʒ

Diuretics. Promotes the discharge of Urine

1 Nitrate of Potasse (Nitre — Dose 8-10 gr 2 hours
2 Super Tart of Potasse (Cremor Tartar) — Do
3 Tartrate of Potasse (Soluble Tartar) — Do 1. 2 ʒ 2 hours
4 Dulcified Spirit of (Nitre) Diaphoretic 20 gtt — Do 30 gtt
5 Digitalis officinalis (Fox Glove) leaves — Do ß 2 gr
6 Nicotiana Tobacum (Tobacco) leaves-Tinct — Do 30, 60 gtt
7 Scillae Maritima (sea onion) squills) syrup — Do 1. 3 gr
8 Copaifera officinalis (Balsam Copaiba) — Do 20. 30 gtt
9 Oil of Turpentine — Do 5. 10 gtt
10 Polygala Senega ( ) America — root powder — Do 10 gr 1 D 3 in Day

11 Meloe vesicatorius (Spanish Flies) Spain Tinct Dose 5-20 gtt 23 day

12

Antilithics

Antilithics are those substances which palliate or relieve the symptoms of calculous

1 Carbonate of Potash) Do 5-20 gr 3 p day
2 Super Do Do ( ) Do ℥ lb 3 p Day
3 Soda saturated with carbonic Acid in Large Doses
4 Lime
5 Magnesia
6 Carbonic Acid — Do 30 gtt 3 Day
7 Muriatic Acid — Do 40 gtt 2 hours
8 Nitric Acid Dilute — Do ℥ ʒ
9 Uva Ursi Folia (or shortleaf) powdered leaves Do
10 Pyrola Umbellata) Do
11 Lupulus communis vel Humulus Lupulus (hop) America In Tincture — Dose ℥ ʒ
12 Oil of Turpentine — Dose 5-15 gtt 3 day
13 Allium Sativum (Garlic) America Do

Diaphoretics

Diaphoretics are those substances which produce a discharge by the skin whether by sensible or insensible perspiration

1 Antimony In different Forms as stated before but in small doses
2 Ipecacuhanna — (Nine 8 gr Ipecac ℥ g Dovers powder Dose) Dose 2-3 p 3 hours

3 Nitre — Dose 10.15 gr

4 All Cathartic Salts combined Cremor Tartar

5 Spiritus Mindererisis - ℥ vinegar saturated with sufficient quantity

6 Opium - 25 gtts of Laud. & 35 lmt. Wine 15 gtts a dose — Ipecac 1 pt

Opii 1 pt Sulphate of Potasse 8 pt — Dose 10 gr

7 Camphor Musk & Sulphur I do not think much of as Diaphoretics

8 Eucatorium perfoliatum (Bone set) leaves & stalk - strong tea

9 Polygala seneka (Snake root) Decoction ℥j to ℔ij of water ½ Dose

10 Lauras Sassafras (Sassafras) root & Bark made in Decoction

11 Guiacum Officinalis (Wood & Gum Resin West Indies Dose 30 gr Powder

12 Daphne Mezereon (Liquorice root) ℥ij to ℔ij of water per Day

13 Sabina (Savine) — Dose

Sialagogues

Sialagogues are those Med which produce an increased secretion of the Salivary Glands

1 Mercury Preparations

1 Calomel Sub Muriate of Mercury Dose - 1.2 gr 3 pr Day

2 Black Sulphuret of Mercury (Ethiops Mineral Dose 5.10 gr

3 Red Sulphuret Do. (Cinnabar)

4 Muriate of Mercury (Corrosive sublimate) Dose 1/8 - 1/4 gr

5 Red Oxyde of Mercury (precipitate per se - Do ½ 1 gr 2 pr Day

6 Red Precipitate - Red oxyde of Mercury by Nitric Acid

7 Grey oxide - Do — Dose 2 gr 2 pr Day

8 Sub Sulphate of Mercury (Turpeth Mineral) Dose

9 White Precipitate

Emenagogues

Emenagogues are those medicines which are supposed to excite the discharge of the menstrual flux

1 Aloes — Dose 5; 15 gr

2 Calomel — ℞ Sulph Ferri ʒ ss Pulv Rad Jalap ʒ j Gum Myrrh ʒ j Vitria Viena ʒ ss (Hoopers Pill ℞)

3 Hellebores Niger 4 ʒ Cochineal ss ʒ Alkohol lb ij ss Dose 30 gtt per day

4 Seneka — In Decoction Do. 4 ʒ per Day

5 Ergot (Spurred Rye) Powder Do 15 gr

6 Sabina (Savine) leaves or oil Do 15 gr

7 The Preparations of Iron —

Anthelmintics

Anthelmintics are those Medicine which have the property of expelling Worms which infest the Alimentary canal

1 Calomel To a child 5 yrs old Dose 5; 6 gr

2 Sulph Ferri gr ( ) 3 gr of calomel for 3 morning with Rhubarb

3 Chenopodium Anthelmintacum (Jerusalem Oak) seeds leaves in Tea

4 Spigelia Marylandica) Decoction ʒ j to lb j of water (Senna

5 Melia Azedarach (Pride of China) Decoction Dose Teacupfull

6 Hellebores Foetidus

7 Carbonate of Ferri ʒ ss (Rust of Iron) Sulph Ferri (B —) 12 powders

8 Muriate of Soda (Salt) Dose ʒ ss

These Dispell the Lumbricoides —

Ascarides

1 Hiera Picra ( ) ℥ to lb j of Brandy Dose a Table spoonfull

2 Oleum Ricini (Castor oil) Dose ℥ j

3 Glysters of Tobacco, camphor tea (made by moistening with spirit & boiling with water (Oil of Turpentine, mercurial preperations &c

Lenia

1 Mercurial Preparations

2 Iron filings For Children Dose Teaspoonfull

3 Tin Do Do ℥ j

4 Amalgam of Tin & mercury Do gtt xxv

5 Cowage ( ) To an adult Do Tablespoonfull

6 Lime Water, Tonic, Chalybeats &c

Epispastics

Epispastics are those Medicines which when externally applied to produce a discharge from the skin under this head I shall place Rubefacient, vesicatories & caustics

Rubefacients

1 Friction, hot Bricks, Cow, Oats &c

2 Olive oil & vol Alkali Liniment.

3 Oleum Terebinthinae (Oil of Turpentine) ℥ 4 Camphor ℥ j

4 Tart Emetic Shinked on Burgundy pitch plaister

5 Sinapism of mustard — horseradish — & garlic

6 Cayenne Pepper

Vesicatories

1 Meloe vesicatorie (Spanish Fly — France & Spain & Italy

2 Lytta Vitata Potatoe fly

Caustics

1 Actual Cautery
2 Seton
3 Caustic Potash (quicklime & Carbonate of Potasse
4 Sulphuric & Nitric Acids
5 Nitrate of Silver (Lunar Caustic)
6 Sulph Cupri
7 (Red Precipitate
8 Burnt Alum
9 Muriate of Mercury Sub (Corrosive Sublimate
10 Juniperus Sabina (Savine)

Stimulants

Stimulants are those Medicines which when applied either externally or internally produce a new action I have divided Stimulants in Diffusible & Permanent

Diffusible Stimulants

1 Vol Alkali (Carbonate of Ammonia) (hartshorn) Dose ℣ gr every 2 hour
2 Camphor (from Rosemary sage & several aromatics - America also from Japan — — Dose
3 Alcohol — —
4 Sulphuric Ether — Dose 20 gtt - ℥ss
5 Hoffmans Mixture - Ether & Oil of Stone Dose ʒj.
6 Oil of Turpentine Do. ʒj

7 Capsicum 5gr) Whole - with Sulph. Copper 1/8) 1 Pill
8 Piper Nigrum (Black Pepper
9 Amomum Zingiber (Ginger) Carb Ferri & Radkhei aa ℥ss - 12 powders one 2 p. Day

Narcotics

Narcotics are those Meds which diminish the sensibility and irritability of the system & producing sleep

1 Opium (Gum Resin) from the papaver somniferum) Turkey & East India — — — Dose 1 gr
Laudanum 1 ℥ Opii to 1 lb alcohol Do 25 gtt
2 Hyoscyamus ( ) Do 1.2 gr
3 Lauro Cerasus (Cherry tree) Europe leaves) Infusion 1 ℥ Fr. Do 5 gtt
4 Atropa Belladona (Deadly Nightshade) leaves — Dose 1.3 gr
5 Conia Maculatum (Cicuta (Hemlock) Extract Do 1.2.5 gr
6 Datura Stramonium (Jamestown weed) Extract Do 2.15 gr
7 Nicotiana Tobaccum (Tobacco) Glyster ℥j to lbj of water Do 1/2
8 Humulus Lupulus (hops) powder leaves Do 3 gr

Antispasmodic

Spasm is an Irregular morbid action of the muscular fibres and Antispasmodics are those Meds which relieve spasm

1 Camphor (obtained from the Laurus Camphora) Japan Dose 5.20 gr
2 Moschus (musk) moschus moschiferous) Asia Do 5 gr 2 hours
3 Castoreum (castor) beaver) Europe, Asia, America Do 5.20 gr
4 Carbonate of Amonia ( ) Do 1.5 gr
5 Oil of Amber ( ) Do 15 gtt
6 Assafoetida Ferula) Assafoetida 2℥ (Gum Resin) Rectiqua ℥) Do Tablespoonfu every 8 hours

7 Valerian Officinalis (Wild valerian) Radix (Europe – Dose ʒj 3p Day
8 Crocus Sativus (saffron)
9 Tar Water – 1 pint of Tar – 2 Gal of water
10 Warm Bath
11 Allium Sativum (Garlic)

TONICS

are those med which strengthen, embrace & give tone to the muscular fibres

1 Cinchona Officinalis (Peruvian Bark) red, Pale, yellow Peru
Cordifolia lancifolia (~~Red~~ Pale Bark) Cinchona cordifolia (~~Red~~ yellow Bark) and
Cinchona oblongefolia (Red Bark) Dose ʒj 1 hour
2 Gentian Lutea Radix. Gentian (Germany, Switzerland Do gr 30
3 Colombo U S Powder root Do ʒß 3 hours
4 Quassia Excelsa lignum (Quassia) W Indies Do gr X
5 Angustura Bark – Southern counties Do ℈j
6 Serpentaria virginiana powdered Do ʒß
7 Prunus virginiana ( ) —
8 Anthemis Nobilis chamamelum (chamomile) Flores Do ʒß 3p Day
9 Century Do
10 Cornus Florida ( ) — Do ʒj
11 Eupatorium Perfoliatum) Do
12 Carbonate of Iron (Rubigo Ferri) Rust of Iron — — Do gr 5-10
13 Sulphate of Iron (Sal Martis) (Copperas)
14 Muriate of Iron Tinct. dissolved with Alcohol (forms Tinct. Ferri mur. Do 10 gtt
15 Cuprum (Copper
16 Ammoniuret Cupri (Sulphate of copper & Carbonate of Ammonia Do 1/3 gr

17 Sulphuret of copper (4g) / Capsicum ℥j - 6 pills - Dose ℥j 2 p

18 Nitrate of silver (Lunar Caustic) Pill — Do 1/8 gr

19 Muriate of Gold

20 Zincum (Zinc) / Sulph of zinc

21 Acetate of zinc is formed by adding to sulph of zinc, Acetate of Lead

22 Arsenic Acid & from Cobalt & nickel — Do 1/16 gr

23 Fowler Solution — Do 10-15 drops 3 p

24 Sulphuric Acid — 30 gtt to 1 pint of water if strong 2 gtt to 1 pint

25 Nitric Acid ℥j Solution of Gum Arabic ℥6

26 Muriatic Acid

Astringents

Astringents are those Mdcs which when applied to the human Body produce a contraction or condensation of the of solids & thereby increasing their density and force of cohesion

1 Extract of catechu gum resin — Dose 20 gr

2 Kino — Dose 23 pr

3 Quercus (Oak — Do ℥j

4 Lignum Campechianse (Logwood

5 Dew Berry root — Black Alder — Geranium maculatum

6 Cupri (Blue vitriol

7 Zinc — Lead gr3

8 Cerussa Acetata (White Lead) subacetate of Lead

9 Sulphate of Alumine (Alum

10 Carbonate of Lime (prept Chalk

Polyrma Myoides

℞ Sulph. Sodae ℥j
Tart. Antimonii grj
Infs. Pulv. No VIII
Bore one every 2 hours
In febrile cases

℞ Sal. Sod. ℥j
Aqua ℥j
Spiritus ℥j
Misce. Cochlear
In effervescence

℞ Nit. Potass. ℥j
Cal. ppt. gr VIII
Tart. Antim. grj
Infs. Pulv. No VIII
Bore